SPECIAL TACTICS

SMALL UNIT

INFANTRY AMBUSH TACTICS

AMBUSH TECHNIQUES AND BATTLECRAFT FOR INFANTRY SQUADS AND PLATOONS

DEVELOPED BY SPECIAL OPERATIONS & INFANTRY VETERANS

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SPECIAL TACTICS™

Special Tactics, LLC

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To those who have gone before us, the living and the fallen

COURSE OVERVIEW
The Lost Art of the Ambush

The ambush is one of the most commonly practiced but least understood tactical skills in the modern U.S. military. The reason for this is rooted in the U.S. Army's decision to use small unit tactical scenarios or "lanes" as the basis for most leadership training across the Army. Leadership is obviously a complex art that is difficult to teach and evaluate. Specific skills and attributes required for effective leadership can vary depending on a leader's occupational specialty and mission set. Therefore, the Army picked small unit infantry operations as a baseline for teaching leadership to all of its personnel, whether they are infantrymen, logisticians, pilots or mechanics etc.

When Army officer cadets go through training, they run through small unit tactical lanes as part of their evaluation, even if they are destined never to fire a weapon in combat. Basic training and basic non-commissioned officer schools also make use of small unit lanes for training and evaluation. Many of the Army's most respected leadership schools such as Ranger School primarily focus on small unit tactical lanes. Components of special operations force qualification courses like the Special Forces Qualification Course look very similar to Ranger School and once again use small unit tactical lanes as the primary medium for training and evaluating candidates.

When students enter any of the "schoolhouses" mentioned above, they are generally coming with extremely varied levels of experience. Even those attending Ranger School or Special Forces Qualification are sometimes new recruits with no combat experience and little more than basic training under their belts when it comes to tactical knowledge. In basic training and cadet training, the average level of experience is generally even lower. This means that the small unit tactical lanes used for training and evaluation in these various schoolhouses need to be very basic and start at the beginning, assuming students have no prior tactical experience.

Keeping things basic means keeping operations small. Squad-level operations are simpler and easier to conduct than platoon or company level operations, so the primary focus of schoolhouse training is on squad-level tactics. However, according to U.S. Army doctrine there are only a small number of tactical tasks or missions that a squad is capable of conducting by

itself, namely recon and ambush. Not surprisingly, the overwhelming majority of tactical lanes run in most schoolhouses end up being ambush lanes for the sake of simplicity.

However, in reality, conducting an ambush is no simple task. Therefore, schoolhouses have had to break down and simplify the ambush into a rigid, predictable set of steps that are easy for inexperienced troopers to remember and execute. Breaking the ambush down in this way also makes it easier for instructors and evaluators with less tactical experience to grade student performance by simply awarding either a "go" or "no-go" to a list of clearly defined and observable criteria. Throwing realistic variables or a living, thinking enemy into the scenario is rarely practical since most students have enough trouble just completing the assigned tasks in the proper order, even when the enemy simply walks down the road and then rolls over and dies as the first shots are fired.

All of this means that most Army personnel get plenty of opportunities (at least more than other tactical tasks) to practice this sort of canned, ambush checklist over and over. As a result, most Army personnel come to identify the word or concept of "ambush" with what they experienced in the schoolhouse which is most likely very far from what a real ambush might look like in combat. The same pattern exists in leadership and small unit tactics training programs of other services but is somewhat less prevalent than it is in the Army.

Like most military doctrine, there is nothing wrong with the traditional schoolhouse ambush formula as long as it is understood in the context of what it was originally intended to be. Schoolhouse training and the doctrinal publications it is based on are meant to be a starting point or foundation upon which to build additional levels of tactical mastery. Unfortunately, most military personnel never have the opportunity to proceed to this next level and end up repeating the same, process-based training evolutions over and over and developing an inaccurate impression of ambush tactics as a result.

Even advanced schools like Ranger School and Special Forces Qualification encounter similar problems. While such schools provide some outstanding training opportunities for small unit leaders and tacticians, most Ranger Instructors or Q-Course instructors will tell you that there is simply not enough time to cover tactical subjects like the ambush in the detail they would like to in the ideal world. A particular frustration among instructors is that the Army's elite training schools are increasingly open to new recruits, meaning that training needs to accommodate the "lowest common denominator" instead of moving on to more advanced subjects with the more experienced students.

In contrast to the way most military personnel have come to understand ambush tactics over the years, as a result of the problems just discussed, the actual art of ambush tactics is extremely broad and complex. Infantry and special operations forces have been developing and enhancing ambush techniques for centuries. Most recently, U.S. Special Operations forces in Vietnam developed extensive experience conducting ambushes and reacting to ambushes while fighting against a highly skilled and fiercely motivated enemy. Many of these Vietnam-era warriors had the benefit of being able to learn from senior leaders who fought against the Japanese and Germans in World War II. If you review tactical manuals published in these periods you will find many creative ambush techniques and ideas that are no longer included in modern doctrine. As ambush tactics were simplified over the years, in some cases to accommodate the

requirements of leadership schoolhouses, this invaluable tactical knowledge and experience was lost.

This book aims to help fill the gap left in modern military doctrine and training by offering a simple and clear discussion of the more advanced ambush techniques that were learned in blood during World War II and Vietnam, as well as more modern tactics developed by infantry and special operations forces during the global war on terror. In addition to Special Tactics publications, some other authors have recently identified the need to capture lessons learned and tactical expertise in small unit combat. In particular, the book *Special Reconnaissance and Advanced Small Unit Patrolling* by LTC (ret) Ed Wolcoff provides an in-depth reference drawn from the vast experience of U.S. Army special operations forces in Vietnam and applying those lessons to modern threats.

What This Book Covers

Like most Special Tactics books, this book aims to provide a short reference on a specific topic that is easy to read and packed with as much useful information as possible. This book focuses on infantry ambush tactics that have the widest real-world battlefield applications. The tactics, techniques and scenarios in this book are intentionally generalized so they can apply to a broad range of combat operations from high-intensity conventional warfare to low-intensity conflict and counterinsurgency.

The book also provides a selection of concepts or "building blocks" including different ways to use terrain/obstacles, different tactical formations, and different ways to employ mines or traps. While the book gives a few examples of how to combine these various building blocks in clever tactical plans, it is up to the reader to figure out how to put the various pieces together to fit his/her specific tactical situation. We do not recommend trying to robotically copy or replicate the suggestions, techniques, or scenarios in this book. They are intended only as examples. In short, this book provides a selection of building materials and some ideas for how to use them, but it is up to you to use your own creativity and initiative to craft the best ambush plan for your mission requirements.

While the concepts and examples in this book can apply to almost any ambush mission or scenario, there are several key subjects that this book does not cover in detail and will need to be addressed in later publications. First, anti-armor ambushes and anti-armor tactics in general are very broad subjects that we cannot cover in detail in a single volume. While the tactics in this book can prove useful for anti-armor operations, there are additional factors to consider when going up against tanks that we have not covered in detail.

Second, while ambush tactics and counter-ambush tactics are closely related, they are both very broad subjects each warranting its own separate attention. Therefore, while there are many lessons in this book that might prove useful to a force attempting to develop counter-ambush capabilities, we will have to save specific counter-ambush techniques and tactics for later publications where we can address them in the detail they deserve. This book also does not go into detail on the specific techniques for employing explosives, mines and boobytraps. While

the book does cover ways to incorporate such weapons and traps into a larger ambush plan, the specific technical skills for building and employing explosive devices is a very complex topic and beyond the scope of this book.

This book is aimed to compliment other Special Tactics books both currently available and in production, particularly those dealing with infantry combat and small unit tactics. If you have not already read our books on *Squad Level Infantry Rural Combat* and *Small Unit Machine Gun Employment,* we highly recommend these books as companions to this volume on ambush tactics. These books provide additional background, supporting information and tactical principles that can prove very useful for conducting ambush operations.

INTRODUCTION
The Four Pillars of Survival

The "four pillars" of survival are proper mindset, situational awareness, skill proficiency and physical fitness. These pillars form the basis for success in all combat situations. This manual is intended not only to teach specific techniques, but rather to increase the reader's actual chances of survival and success in a real-life combat situation. An expert marksman who is not mentally prepared for the stress of combat and not ready to employ lethal force can lose to an untrained adversary. Lack of situational awareness, even for a moment, can cause an experienced fighter to fall victim to unskilled enemies. Therefore, any combat training program must rest on the following four pillars.

Proper Mindset

Proper mindset is the most critical of the four pillars. In the simplest terms, people with the proper mindset devote significant time and energy to preparing for combat and training for the worst-case scenario. Many people will learn to shoot a pistol or study a martial art, but their skills decline quickly because they fail to practice frequently enough. Having the proper mindset means being tough, determined, never cutting corners, and taking every precaution to ensure survival. In a combat situation, having the proper mindset means being prepared to employ lethal force without hesitation and never quitting during the fight regardless of fear or pain. The training suggestions in this manual will help you develop the proper mindset.

Situational Awareness

Lack of situational awareness is one of the leading causes of failure or death in combat situations. In modern society, most people's situational awareness is very low. They generally spend their day wrapped up in their own thoughts and problems and pay little attention to what is going on

around them. People who live in relatively secure environments fall into even deeper levels of complacency and unpreparedness. The mentality of, "it can't happen to me," can ultimately prove to be disastrously wrong. Most victims of crime, terrorism and other deadly attacks lived their lives thinking, "it can't happen to me."

People with the proper mindset understand the importance of situational awareness and make disciplined efforts to cultivate it. Situational awareness begins with awareness of the threat and awareness that bad things can happen to anyone. Situational awareness involves trying to remain alert at all times without being paranoid. In a combat environment, situational awareness includes conducting detailed area studies prior to deployment, following trends in enemy tactics, and studying current intelligence reports. The best way to improve your situational awareness is to make a conscious effort to continually cultivate and improve it.

Skill Proficiency

Once you have the proper mindset and maintain good situational awareness, the next step is to ensure you have the proper skills or "tools" to protect yourself in a combat situation. When striving to improve skill proficiency it is important to choose the best skills and techniques that are simple, effective, easy to perform and can realistically apply to a real-life scenario. Then you must practice these techniques repeatedly until they become second nature. This will maximize the chances that you will respond immediately in a high-stress situation. The central focus of this manual is to help you build skill proficiency.

Physical Fitness

Fitness is a critical but often overlooked factor that affects your chances of survival in a combat situation. Even skilled fighters with the proper mindset and high levels of situational awareness can lose a fight simply because they run out of energy. In order to maintain adequate levels of combat fitness, you do not need to achieve the same fitness level as a professional or Olympic athlete. Rather, the key is merely to stay healthy, maintain a decent level of cardiovascular endurance, running speed, functional strength, and coordination. Popular commercial fitness programs don't always focus on the most useful abilities needed for combat. For example, many people jog but how many also run sprints to build speed? Simply being able to run fast without falling is one of the most critical survival skills in a gunfight or emergency situation, yet most people rarely practice sprinting. For those interested in combat fitness, Special Tactics provides a range of books and courses on the subject.

AMBUSH FUNDAMENTALS
Planning and Tactical Concepts

By doctrinal definition, an ambush is a surprise attack from a concealed position on a moving or temporarily halted enemy target. Unlike a raid where the enemy is stationary, an ambush seeks to surprise an enemy who is moving from one place to another. Mobile forces are inherently vulnerable in a number of obvious ways. When a force is moving through unfamiliar terrain it has no way of knowing what lies around the next bend in the road or over the next ridgeline. An ambushing force has a great advantage in that it can take time to prepare a clever trap while the moving enemy might only have seconds to respond.

A good ambush attempts to stack the odds against the enemy as much as possible, anticipating enemy reactions and planning against them accordingly. The challenge for the ambush force is determining exactly where and when to ambush the enemy while being prepared to quickly escape to safety before larger enemy forces have time to respond. This first section covers a selection of key concepts that relate to ambush operations and are useful for understanding the various tactics and techniques explained later in the book.

Ambush Planning Considerations

Planning for an ambush mission is similar to planning for any mission. Detailed discussions of hasty and deliberate planning methods, troop leadership, enemy analysis, course of action development and orders production are beyond the scope of this book. Such topics will be covered in other books specifically focused on operations, intelligence, and planning. However, it is difficult to place ambush tactics in the proper context without some discussion of planning and intelligence.

Many U.S. military leaders have developed only a shallow understanding of ambush tactics during their careers. As mentioned earlier, the classic schoolhouse ambush lane is partly to blame for this problem. In real-world combat there are many important questions that must be both asked and answered before any ambush mission can have a chance of success. The first

and most important question is why we are conducting an ambush in the first place. While it is possible that the deeper purpose behind any combat operation might simply be to destroy enemy forces and attrit the enemy, this "body count" approach to warfare has not proven effective historically speaking.

An ambush operation should ideally serve a greater purpose that integrates with a larger tactical or operational concept. For example, consider the scenario that enemy supply levels are low at the front lines because friendly aircraft have destroyed the enemy rail networks and the only way the enemy can get supplies is to move them by truck at night. In this scenario, light infantry or special operations units might infiltrate behind enemy lines to set up ambushes in order to destroy enemy supply convoys headed to the front. This will force the enemy to react in some way, possibly shifting supply routes to larger roads which are easier to target from the air. Or it might force the enemy to pull more combat forces from the front to provide escort for the convoys.

Another potential scenario might involve a battalion or brigade level defensive operation where allied forces are stretched thin and cannot cover all enemy avenues of approach. An infantry unit might be tasked with conducting a defense in-sector along a less likely avenue of approach that passes through wooded or mountainous terrain. This infantry unit might then set up a network of ambushes along roads intended to delay or disrupt any enemy forces moving through the sector. The resulting delays might give the main force time to reposition and block the enemy advance.

In a low intensity conflict or counterinsurgency operation, you might set up an ambush to capture a specific insurgent leader who you know will be moving down a particular road at a particular time. Gathering the intelligence to predict the enemy leader's precise route and timeline will likely have taken a lot of work and you still might need to emplace several ambushes to cover various routes if you are uncertain of which one the leader will take. Conducting such an operation will also require detailed knowledge of enemy early-warning networks to ensure the locals do not spot your forces and relay your positions to the insurgents.

Ambush operations can also have a powerful psychological effect on enemy morale. There are many historical examples where a string of ambushes and raids behind the lines have greatly impacted enemy operational efficiency and instilled fear among troops stationed in locations that were once considered safe. Commando raids executed by the SAS, OSS and allied partisans during World War II provide an excellent example of the disruptive effect that ambush operations can have on enemy leaders and planners at the highest levels.

These are just a few examples of why you might conduct an ambush in a real-world mission. Note that in the previous examples, understanding the reason why you are conducting the ambush is critically important to ensure you focus on the right thing when engaging the enemy. For example, in the first scenario, your mission was to destroy the fuel and prevent it from reaching the front lines. You might be able to accomplish that mission from a distance using a machine gun or remotely detonated mines and not need to risk assaulting through the objective. However, the mission to capture the insurgent will require you to physically assault the enemy convoy.

In the second example where your mission is to delay a larger enemy force, since you are not expected to destroy the enemy, you might not want to stage one large ambush designed to

destroy as many enemy forces as possible, but rather might spread your forces out into smaller ambushes to harass the enemy, disrupt his formations and further delay his forward movement. In short, the deeper reason why you are conducting the ambush is critically important to how you develop the ambush plan.

Another critical factor to consider is the enemy's reaction. The enemy does not want to get ambushed. You might succeed in surprising the enemy once or twice but if you start to establish a pattern of ambushing the enemy, he will take action to counter you. The enemy's counter-ambush efforts may take many forms. He may begin to vary his routes and timetable, making it more difficult for you to predict his location. He may augment security for his convoys or start conducting route clearance operations or aerial surveillance. He might start developing counter-ambush tactics and training his forces accordingly.

The key point to remember is that the enemy is a living, thinking opponent who is trying to defeat you and thwart your efforts in every way possible. Therefore, an ambush tactic that works the first few times, might stop working as the enemy identifies a pattern and implements countermeasures. This means you in turn will need to adjust your tactics to stay one step ahead of the enemy and keep him off balance. It is also important to remember that if the enemy cannot actually prevent your ambushes, he may revert to trying to discourage you from emplacing ambushes in the first place by focusing on destroying ambush forces after the ambush takes place. If all of your ambushes are successful but every ambush force is subsequently hunted down and destroyed, your ambush operations will likely lose momentum and morale quickly.

When planning the details of your ambush there are many factors that you will need to take into account that typically do not come into play when conducting a typical schoolhouse ambush lane. First of all, how can you know that the enemy will take a particular route? You may need to conduct detailed intelligence analysis and pattern analysis to ensure your ambush doesn't sit and wait for an enemy who never comes. In some cases, you might need to set up several ambushes to cover several possible enemy routes.

Another concern is when the enemy will show up. You might identify the route the enemy is going to use but not know when the enemy force will pass through the area. In schoolhouse ambush lanes the enemy typically shows up a few minutes after the ambush is set. In real-world combat your ambush force might be waiting for a long time, not knowing when the enemy will appear or even if he will show up at all. How long are you prepared to wait in the ambush site? At a certain point you will need to establish a rest plan or rotation plan, as well as increased security measures if you want to keep ambushes in place for an extended period.

Another key consideration is the amount of traffic on the target road, as well as civilian activity in the area and the capabilities of enemy early warning networks. You might know where and when the enemy is going to show up but what if there are civilian vehicles driving up and down the road constantly? If there are civilians in the area, how can you set up your ambush without being spotted? Are the civilians loyal to the enemy or supporting allied forces? These are just a few examples of planning considerations for an ambush operation. Without detailed planning and accurate intelligence, no ambush can have a good chance of success.

Ambush Types and Formations

Most ambush references divide ambushes into different types or categories. Some common categories include hasty ambush vs. deliberate ambush and near ambush vs. far ambush. A common mistake is to insist that an ambush has to be either one or the other. In reality, these categories operate along a spectrum. Viewing ambush types/categories as a spectrum as opposed to all-or-nothing definitions offers more options and flexibility for how best to set up an ambush in any given situation.

Hasty Ambush vs. Deliberate Ambush

The hasty-deliberate spectrum relates to how much time you have to set up an ambush. At one end of the spectrum, you might unexpectedly see an enemy convoy moving towards you on a road, giving you only a few seconds to set up an ambush before the convoy arrives. On the other end of the spectrum, you may have hours or even days to carefully set up a complex ambush to trap and surprise the enemy. In other cases, you might not know how much time you have before an enemy element arrives and you may therefore decide to set up a hasty ambush right away to be prepared if the enemy shows up unexpectedly, but then slowly start to improve your ambush and transform it into a more deliberate ambush as you have time.

We will discuss techniques for setting up both hasty and deliberate ambushes later on in this book. Once again, it is important to remember that most ambushes will not fit the extreme cases of either category. When confronted with a mission or task to ambush the enemy you must consider how much time you have and develop an appropriate plan based on these time constraints. The most hasty ambushes are essentially battle drills that you will likely not be able to execute in time if you have not rehearsed them beforehand. Some of the techniques in this book, like incorporating mines and obstacles into your ambush will by necessity take time and are therefore only appropriate to consider in a more deliberate ambush scenario.

Near Ambush vs. Far Ambush

In the U.S. military, the terms near ambush and far ambush are often more commonly used when discussing counter ambush tactics as opposed to ambush tactics. The battle drills for reacting to an enemy near ambush (inside hand grenade range) are different from those for reacting to a far ambush (outside hand grenade range). However, the distance between the ambush and the kill zone is also very important for forces setting up the ambush.

It is up to you how far away from the kill zone you choose to set up your ambush. Defining a near ambush as being inside grenade range may be helpful in some cases but not relevant in all situations. A more general way to think about near ambush vs. far ambush is the effect you want to have on the enemy. As already discussed, ambush missions are dangerous. The enemy will do everything in his power to counter your ambush or at least hunt down and destroy your ambushing forces as you are trying to escape. You will generally have a short time window before your ambush force goes from being the hunter to the hunted. Therefore, anything you can do to get off the objective and break contact quickly will greatly increase your chances of

survival. In short, executing a far ambush increases your chances of being able to come back and fight another day and conduct follow-on missions to keep the pressure on the enemy.

With this consideration in mind, the farther you are away from the kill zone during your ambush the easier it will be for you to break contact and the more difficult it will be for the enemy to find and fix your force as you are pulling back. Therefore, in most cases you will want to set up your forces farther away (far ambush) from the enemy unless there is a specific reason you need to be closer (near ambush). There are a number of reasons why you might want to execute a near ambush. One of the most common is that your mission calls for physically assaulting through the kill zone in order to gather intelligence, take prisoners or capture a specific individual. In other cases, the terrain might make it impossible to see and effectively engage the enemy from a distance, forcing you to move closer.

As we will discuss later on, it is also possible to have different elements within the ambush force engage from different ranges either simultaneously or sequentially to take maximum advantage of the terrain and the capabilities of your weapon systems while mitigating risk. It is also possible to set up a hasty ambush farther away from the objective until you have time to recon the area and set up a well-camouflaged near ambush position if needed. In summary, it is best not to look at each ambush as either a near ambush or a far ambush but rather to choose the engagement distances that best fit your mission and the tactical situation.

Point Ambush vs. Area Ambush

In simple terms, a point ambush is executed in a single location against a single enemy target or unit. Generally, a point ambush is conducted by a unit that is roughly squad-sized or smaller since massing and coordinating the fires of a large unit in a small area can be difficult or dangerous, especially since units that are bunched up are highly vulnerable to artillery and area fire weapons. In most cases, a point ambush is executed by a single ambush force against a single target in one location.

An area ambush consists of several smaller ambushes spread across a larger area or sector. As already mentioned, executing a point ambush with a force larger than a squad can be difficult or inefficient. Therefore, planning and executing ambushes at the platoon level and above generally involves coordinating multiple squad-level point ambushes into a larger area ambush. There are many different ways to integrate different point ambushes into an area ambush plan. We will discuss area ambush principles and techniques in more detail later on. At the most basic level, area ambushes either target multiple elements of a larger enemy formation or cover multiple avenues of approach passing through a sector.

Ambush Formations

In addition to the different types and categories of ambushes there are also a variety of different ambush formations. As with most other techniques in this book, ambush formations are not rigid prescriptions that must be precisely reproduced on the battlefield. Rather, each formation capitalizes on certain tactical principles or concepts that offer different advantages to the ambushing force. Every formation also has disadvantages and weaknesses so you should therefore always be careful to choose the formation that best fits your specific situation.

The formations covered in this book include the linear ambush formation, the L-Shape, Z-Shape, V-Shape, Y-Shape and X-Shape formations. Other ambush formations besides these exist and can be found in various doctrinal publications from different countries and eras. However, these formations are the most applicable to a variety of tactical situations and are also fairly safe to execute without risking friendly fire. As already mentioned, you should not hesitate to modify, adjust, or combine the formations in this book to meet specific mission requirements or take advantage of the surrounding terrain.

Infantry Weapons Overview

The number of weapons that an infantry unit could use in an ambush is nearly unlimited, especially when you consider the inclusion of explosive devices and improvised traps. However, in most cases, ambush forces will employ the following standard infantry weapons. A brief review of infantry weapons and their capabilities is provided below for those less familiar with infantry combat. Most infantrymen carry an assault rifle or automatic rifle, usually either 5.56mm or 7.62mm. The assault rifle is lightweight and reasonably accurate and powerful. While most assault rifles have the ability to fire in a fully automatic mode, they are generally more effective when operated in single-shot mode. In addition, individual riflemen generally don't carry enough ammunition to fire their rifles on full-auto for any length of time. Below is an example of a common 5.56mm assault rifle with no optics attached.

While the rifle is the most common infantry weapon, the machine gun is typically the most decisive and important weapon in the squad or platoon. The firepower provided by a machine gun can sometimes be considered greater than the rest of the squad weapons combined. This is because of the machine gun's high rate of fire, greater range and the armor penetration of the larger, faster machine gun bullets. Since it is such a critical weapon, most modern squads will employ at least one machine gun. However, the way these guns are employed and organized in the squad can vary. Below is an example of a 7.62 mm medium machine gun.

In the U.S. military, light machine guns (5.56 mm) are organic to each team. This means the machine guns go wherever the team goes. However, medium machine guns (7.62 mm) are not organic to the squad but are assigned at the platoon-level, one unit level above the squad. This allows the platoon leader to assign the machine guns to whatever squad he/she chooses. Ideally, each squad will have a medium machine gun attached. Therefore, a typical U.S. Army squad will have 2 x light machine guns and 1 x medium machine gun. Below is an example of a 5.56 mm light machine gun.

Not all military forces organize their machine guns in this way. In some forces, medium machine guns are organic to the squad. This means that the machine gun is actually part of the squad and goes everywhere the squad goes. In some cases, the squad might have additional light machine guns distributed among the other teams or in other cases, the single medium machine gun will provide the centerpiece of firepower while the rest of the squad focuses on speed and mobility.

The other most common squad weapon is the grenade launcher. The grenade launcher is particularly useful for firing at areas that the squad members cannot directly see, since grenades can be lobbed over hills and walls etc. In the U.S. Army, each team has one person who is equipped with a 40mm grenade launcher. Therefore, the standard U.S. Army squad has a total of 2 x light machine guns, 2 x 40mm grenade launchers and an optional attachment of at least 1 x medium machine gun. Below is an example of an assault rifle equipped with a 40mm grenade launcher.

A particularly important weapon for ambush operations is the directional fragmentation mine. The example used in this book and common in U.S. military units is the M18A1 Claymore antipersonnel mine. The Claymore essentially operates like a very large shotgun, using an explosive charge to propel hundreds of steel balls in a 60-degree arc out in front of the mine. Since the claymore is a directional mine, it is designed to be dangerous only to troops passing within the 60-degree arc in front of the mine. This allows infantry units to integrate the mine into an ambush formation pointing towards the enemy. However, like all explosive devices the Claymore may launch projectiles in unexpected directions, so it is critical that units use caution when emplacing the claymore, either keeping distance from the mine or placing terrain or large trees to shield friendly forces from the blast.

Infantry units generally employ the Claymore as a command-detonated mine, meaning that a leader or trooper will detonate the mine manually from a distance using a clacker. The clacker is attached to the mine with the wire that is included in the claymore bag/kit. For units that are familiar with more advanced explosives and boobytrap techniques, the claymore can also be rigged to detonate using a tripwire or other methods.

There are many other types of mines, explosive devices and boobytraps that an ambush force can employ to make an ambush more effective. The art of employing explosives and boobytraps against the enemy is a very broad topic in itself. Detailed instruction in how to prepare, emplace and employ explosives or traps is beyond the scope of this book. However, if your unit includes

sappers, engineers or special operations personnel who are experienced with explosives, you can take the same core concepts in this book to greater levels of effectiveness by devising cunning traps and integrating them into your ambush plan.

Another type of infantry weapon that can be relevant to the ambush force is the anti-tank rocket launcher or anti-tank guided missile (ATGM). Anti-tank rockets and missiles come in many different sizes and varieties. Some are guided and others are unguided. Some are capable of engaging tanks with heavy armor, others are only capable of engaging lightly armored vehicles. The maximum effective ranges of various rockets and missiles varies greatly as well. Whatever type of anti-armor weapons you have available in your unit, be sure to study their capabilities carefully and understand their strengths and weaknesses.

As already mentioned, anti-armor tactics and anti-armor ambushes are very broad topics that are beyond the scope of this book. This book focuses primarily on ambushing dismounted formations, unarmored convoys, and lightly armored vehicles only. In this context, you are most likely to use anti-tank rockets and missiles in one of two ways. First, you can assign them to your security positions. If your force is expecting to ambush an unarmored logistics convoy but unexpectedly sees a column of tanks coming down the road, it can be useful for the security position to have some anti-armor capability to attempt to delay the enemy or destroy at least one enemy vehicle to buy time for the rest of the force to break contact.

The other option is to use rockets to augment the elements firing on the kill zone. In some cases, convoys will employ armored vehicles or gun trucks as escorts. If this is the case, having anti-armor weapons that are able to fire on the kill zone can help you neutralize these armored threats as quickly as possible. In most cases, infantry units conducting an ambush will be equipped with lightweight, unguided rockets such as the M136 AT4 or the smaller M72 Light Antitank Weapon (LAW) as shown below.

Organization of the Ambush Force

There are many different ways you can organize an ambush force, some of which we will discuss later in this book. For more general coverage of infantry unit task organization, we recommend reviewing our other infantry combat manuals, some of which are already available at the time of this publication and others that are upcoming. When organizing the ambush force, remember that the size of the force can vary considerably from a small, two-person element to a company-sized force spread across multiple ambush sites. The ambush force might take advantage of attachments, additional machine guns, engineer assets or artillery support. Therefore, there are many possibilities for how to organize an ambush force.

By doctrine, an ambush force will generally consist of three different types of elements: security elements, support elements and assault elements. Security elements provide early warning for the ambush, identify the incoming target, and isolate the objective once the ambush begins. Support elements are generally comprised of heavier weapons like machine guns and are primarily responsible from suppressing or destroying enemy forces in the ambush kill zone. The assault element is responsible for assaulting through the enemy formation to finish the enemy force, take prisoners and collect intelligence. As we will discuss later on, an ambush does not necessarily need to include security, support and assault elements. Some ambushes will include only two out of three elements, and some might have only one. Therefore, while thinking about ambush organization in terms of security, support and assault can be a useful starting point, doctrine can and should change based on real-world mission requirements.

Succession of Command

One of the most critical aspects of any unit's organization is the succession of command. Most infantry doctrine will advocate reviewing the succession of command during an operations order or pre-mission briefing. However, in most cases, the leader will only emphasize the first few levels of command and there will not be an established or rehearsed plan for what to do if all or most of the leaders in the unit are lost. It is not surprising that units fighting in modern conflict have neglected the importance of succession of command since they rarely suffer more than a few casualties in a single engagement. However, in past conflicts it was not uncommon for infantry units to lose most or all of their leaders in the first few minutes of combat. If we are faced with high-intensity warfare scenarios in the future, we must be prepared to deal with these levels of casualties.

Therefore, instead of just mentioning it during the operation order, succession of command should be emphasized in every aspect of training and operations. The succession command will go from the senior leader down to the most junior unit member and everyone in the unit must know the succession of command by heart. More importantly, during training events units have to practice reacting when leaders are killed. Junior personnel must be able to step up, assume command and continue the fight without the unit losing momentum.

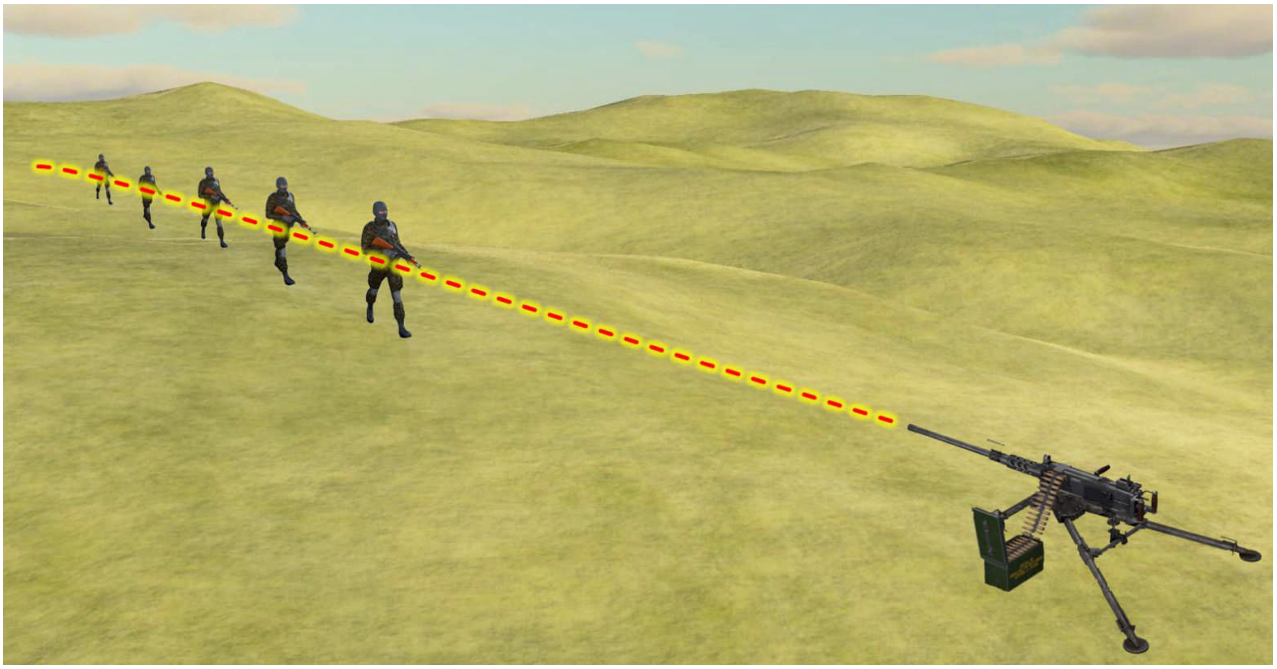
Tactical Concepts Relating to the Ambush

There are certain, key tactical concepts that are particularly important for ambush operations and come up again and again throughout this book. Readers with extensive military experience or readers who have read some of our other infantry tactics books will probably already be familiar with these concepts. However, to ensure this book is self-contained and easy to understand, the remainder of this section will briefly review the most important tactical concepts that will prove useful for understanding the tactics and techniques described later on.

TACTICAL CONCEPTS: ENFILADE FIRE

Fire Aligned with the Formation's Long Axis

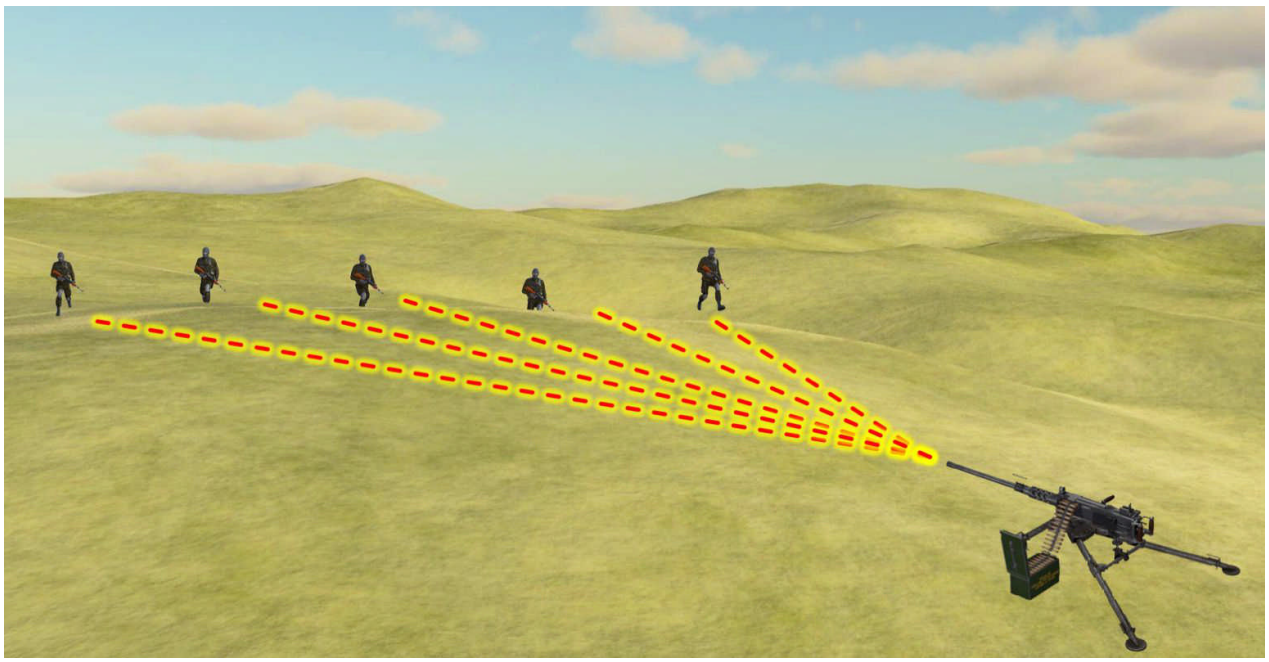
Enfilade fire is when the trajectory of fire (or the machine gun's beaten zone) is aligned and parallel with the long axis of the enemy formation. This is the most lethal orientation of fire as it relates to the enemy's formation. This is because as a bullet passes through the formation, it will have a greater chance of hitting someone if the entire element is in a line. A single bullet can also pass through two people. Enfilade fire also makes the shooter's job easier since he/she can target the entire formation without having to traverse the weapon to the left or right. The image below shows an example of enfilade fire.



TACTICAL CONCEPTS: ENFILADE FIRE

The Opposite of Enfilade Fire

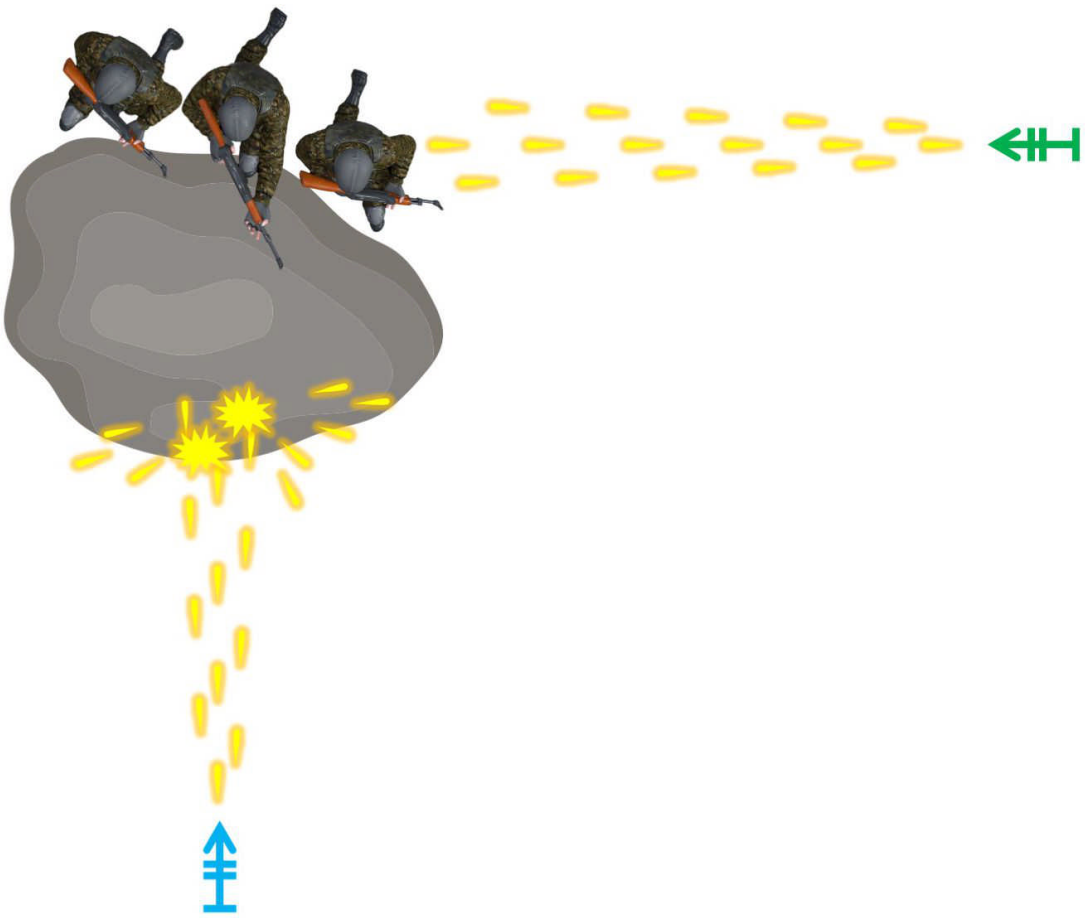
While more linear formations are particularly vulnerable to enfilade fire that passes through their long axis, they are less vulnerable to fire that is perpendicular to the long axis for several reasons. The illustration below gives an example of this. Each incoming bullet has less chances of hitting and if it does hit someone, it will pass through the formation and not hit anyone else. It is also more difficult for the gun to engage multiple targets since it will have to traverse left and right to engage each target. For this reason, ambushing forces should always try to achieve enfilade fire on the enemy formation with at least some of the force's weapons.



TACTICAL CONCEPTS: ANGLES OF FIRE

Widening the Engagement Angle and the "Tactical-L"

The term tactical-L describes a situation where the enemy is taking fire from two perpendicular (90-degree) directions. This makes it difficult for the enemy to take cover since taking cover from one direction of fire will generally expose him to the other direction of fire. In the example below, you have two machine guns firing from a tactical-L on three enemy troops taking cover behind a large boulder. The boulder is protecting them from fire to their front (from the gun marked in blue) but the fire coming in from the flank (the gun marked in green) is about to cut down their formation. If the enemy troops repositioned to take cover from the green gun, the blue gun would then have a clear field of fire. Therefore, achieving a tactical-L with your fire makes it difficult for the enemy to take cover. Even if the enemy is dug in, with protection from every angle, the tactical-L still offers an advantage since the enemy will have to distribute their return fire in two different directions. It is also important to note that it is not critical to achieve a perfect "L" or precise 90-degree angle for the concept of the tactical-L to prove effective. If you widen the angle between your guns, even slightly, you are taking advantage of the tactical-L concept.



TACTICAL CONCEPTS: COVER AND CONCEALMENT

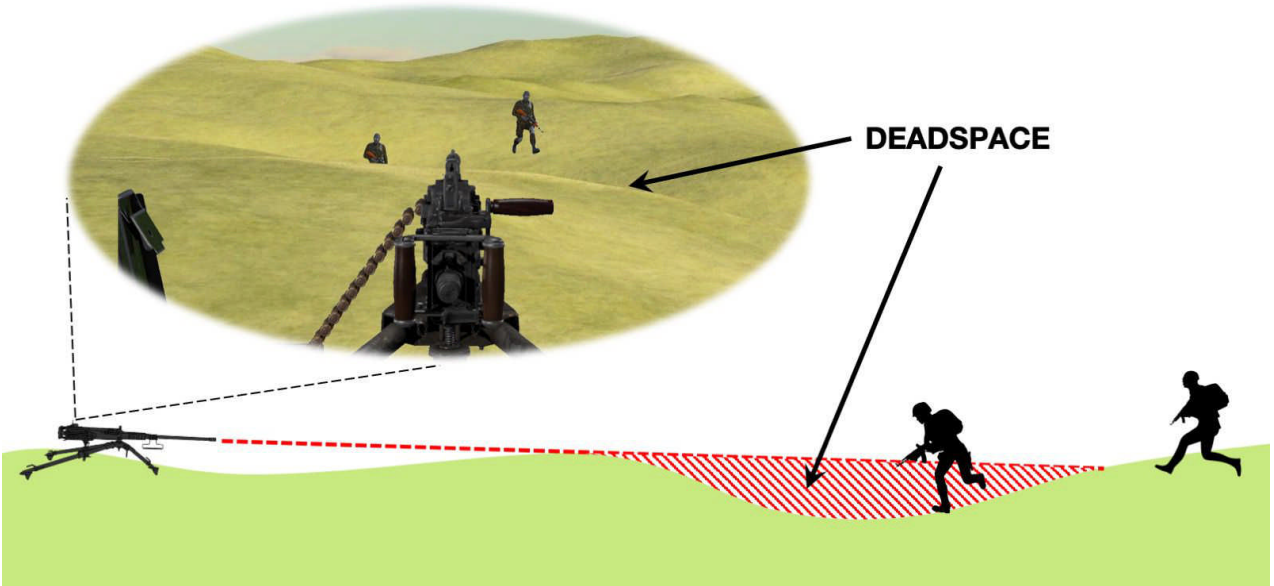
Protect Your Ambush from Enemy Fire

While it is important to ensure your ambush elements have clear fields of fire, you must also ensure they are protected behind adequate cover and concealment. Cover provides protection from enemy bullets while concealment only protects you from enemy observation. Therefore, when protecting your troops, finding good cover is the highest priority. The examples in green below all provide good cover, meaning they can stop enemy bullets. The examples in red might provide concealment but will not protect you from enemy bullets. Therefore, you should not position your forces, particularly your machine guns, behind a bush and expect the bush to protect against enemy fire. While this might seem obvious, even experienced units often fail to understand what constitutes effective cover. Taking cover behind a small tree or a wall constructed from light materials like plywood will not protect you from bullets. It is also important to note the relationship between cover and fields of fire. It can be difficult finding a position that provides both good cover and good fields of fire. Positions that offer better fields of fire are often more exposed and offer less cover and protection. Do your best to find the positions that offers the best balance of cover and field of fire based on the situation and your mission.

TACTICAL CONCEPTS: DEAD SPACE

Areas that You Cannot See or Engage with Direct Fire

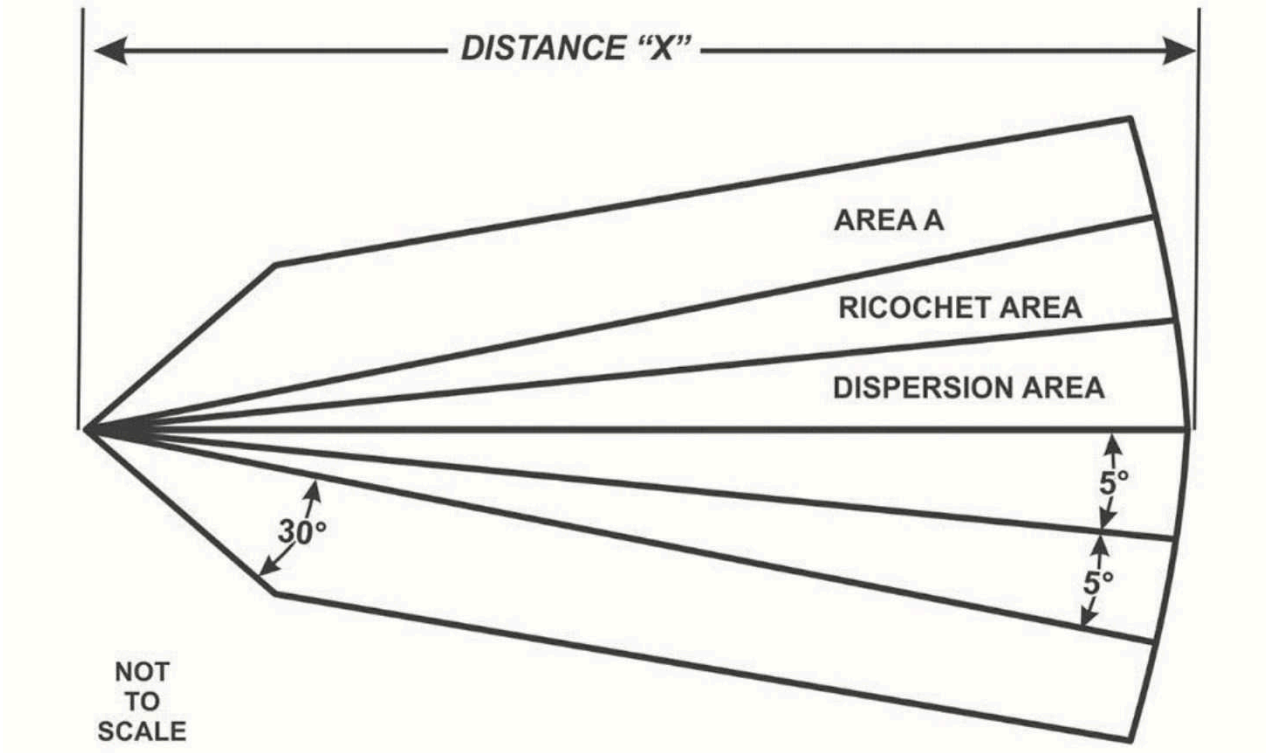
When assigning sectors of fire for your various elements and weapons, you will identify some areas within each sector where an enemy could hide. This could be areas behind a small hill, or sunken areas in a dip in the terrain as in the example below. These areas are known as dead space and they are areas that you cannot engage with direct fire weapons like rifles or machine guns. It is important to identify these areas and plan for what to do should the enemy try to take advantage of them. If you are particularly concerned about certain areas of dead space you may want to assign indirect fire weapons (such as grenade launchers or mortars) to cover these areas. You may also be able to emplace obstacles, traps, or mines to block off these areas.



TACTICAL CONCEPTS: SURFACE DANGER ZONES

Planning for Bullet Dispersion and Ricochet

The diagram below is taken from the U.S. Army's Infantry Squad and Platoon field manual and gives a visual representation of how the U.S. Army calculates surface danger zones for direct fire weapons such as light, medium, and heavy machine guns. Different services and countries might take slightly different approaches, but the general concepts and approximate calculation values remain consistent. Explaining the diagram, "distance X" at the top represents the maximum range (not to be confused with the maximum effective range) of the machine gun. The horizontal line represents the gun's aiming direction. 5-degrees to either side of that is the dispersion area, which represents the area where bullets are likely to disperse based on movement of the gun and the cone of fire. An additional 5-degrees to either side of the dispersion area is the ricochet area. This is the area where bullets might disperse due to ricochets. Therefore, when emplacing a machine gun, it is unsafe for friendly forces to be anywhere inside a 20-degree arc extending out to the gun's maximum range. Understanding these danger areas is critical when emplacing weapon systems and tactical elements as part of an ambush to minimize the chances of accidental friendly fire incidents.



AMBUSH FUNDAMENTALS
Schoolhouse Linear Ambush

As already discussed in the first chapter, the schoolhouse linear ambush has evolved out of the requirements of leadership schools like Ranger School and selection/qualification courses like the Special Forces Qualification Course. As a result, the nature of the linear ambush and how it can or should be actually employed in combat has grown cloudy over the years. As it was originally intended, the schoolhouse linear ambush does provide a good baseline for understanding the fundamental principles and mechanics behind an infantry ambush. Combined with the fact that the schoolhouse linear ambush is the type of ambush that most military personnel are most familiar with, it makes a logical starting point for any discussion of ambush tactics.

As mentioned earlier and as will be discussed further in the coming pages, the main problem with the way the schoolhouse teaches ambush is not with the tactics themselves but rather that they are presented as a rigid formula or checklist that students must follow to the letter. In short, the ambush is not presented as a tactical problem-solving exercise against a living, thinking enemy but rather as a series of steps that must be followed in order and adhere to clearly defined measures of performance. The reason for this is to make it easier for instructors to grade, evaluate and quantify student performance. However, the ultimate outcome is that students get very good at following a rigid process but lose the ability to think creatively and fight effectively.

As already discussed, the schoolhouse linear ambush is intended only as a starting point or foundation for more advanced and in-depth tactical education. However, the unfortunate reality is that most troopers never get around to this more advanced training, so the process-oriented schoolhouse linear ambush is the only exposure they ever get to ambush tactics. Therefore, this book aims to cover the schoolhouse linear ambush in the proper context and then move on to more advanced techniques.

Most importantly, the rigid steps and tactical configurations of the schoolhouse linear ambush must not be viewed as hard-and-fast rules but rather guidelines that are tied to a deeper logic or reasoning. For example, there is nothing wrong with teaching troopers to emplace their

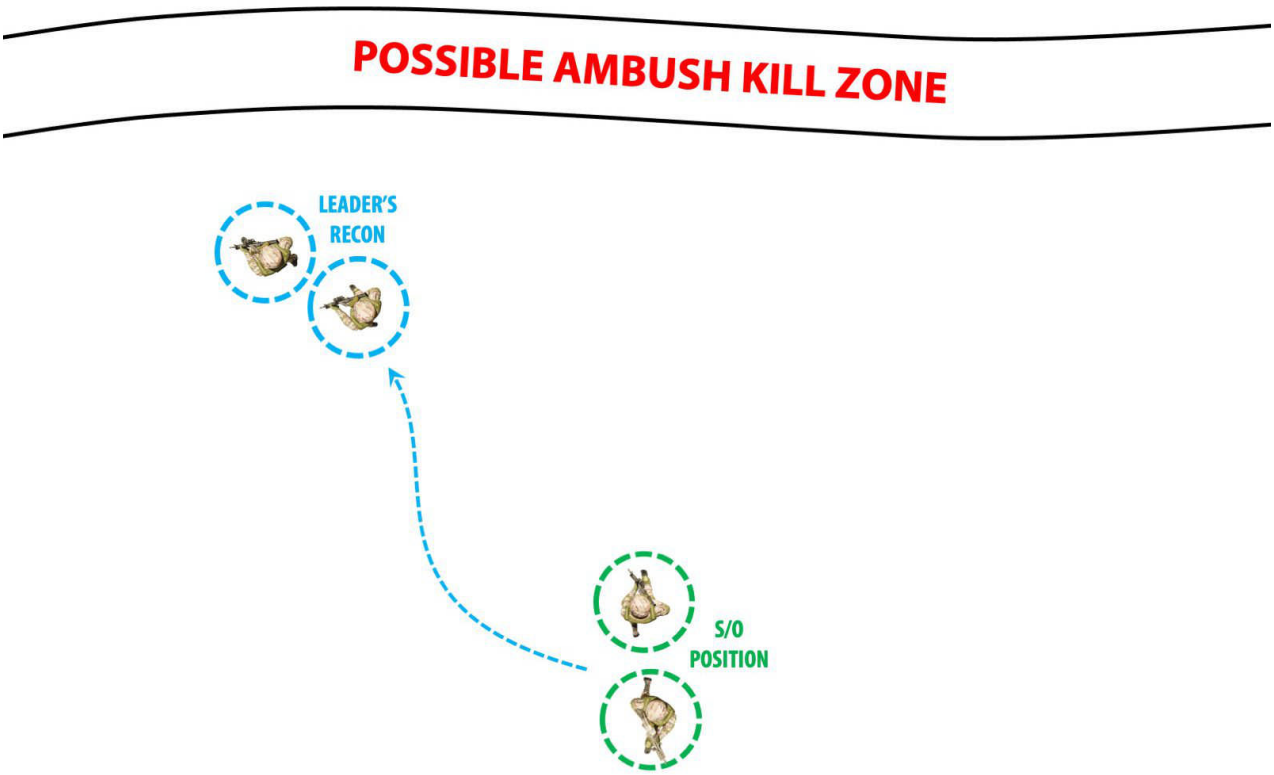
security positions 80-100 meters from the ambush line, as long as students do not think that they must always place security within these bounds regardless of the tactical situation. More importantly, students must understand the deeper logic behind placing security at a given distance so that they can use their brains to adjust their tactics based on the situation. In short, there generally isn't anything wrong with the schoolhouse linear ambush as long as it is taught properly and understood in context.

This chapter aims to provide a brief review of the general guidelines, steps, and mechanics for setting up a schoolhouse linear ambush. The aim is not to go into minute detail as many schools do but rather to cover the main points and understand the general concepts. Following this, we will examine some of the main problems or weaknesses of the schoolhouse linear ambush, especially when it is executed in a rigid and inflexible manner.

SCHOOLHOUSE LINEAR AMBUSH: GENERAL OVERVIEW

STEP 1: Leader's Recon of the Ambush Site

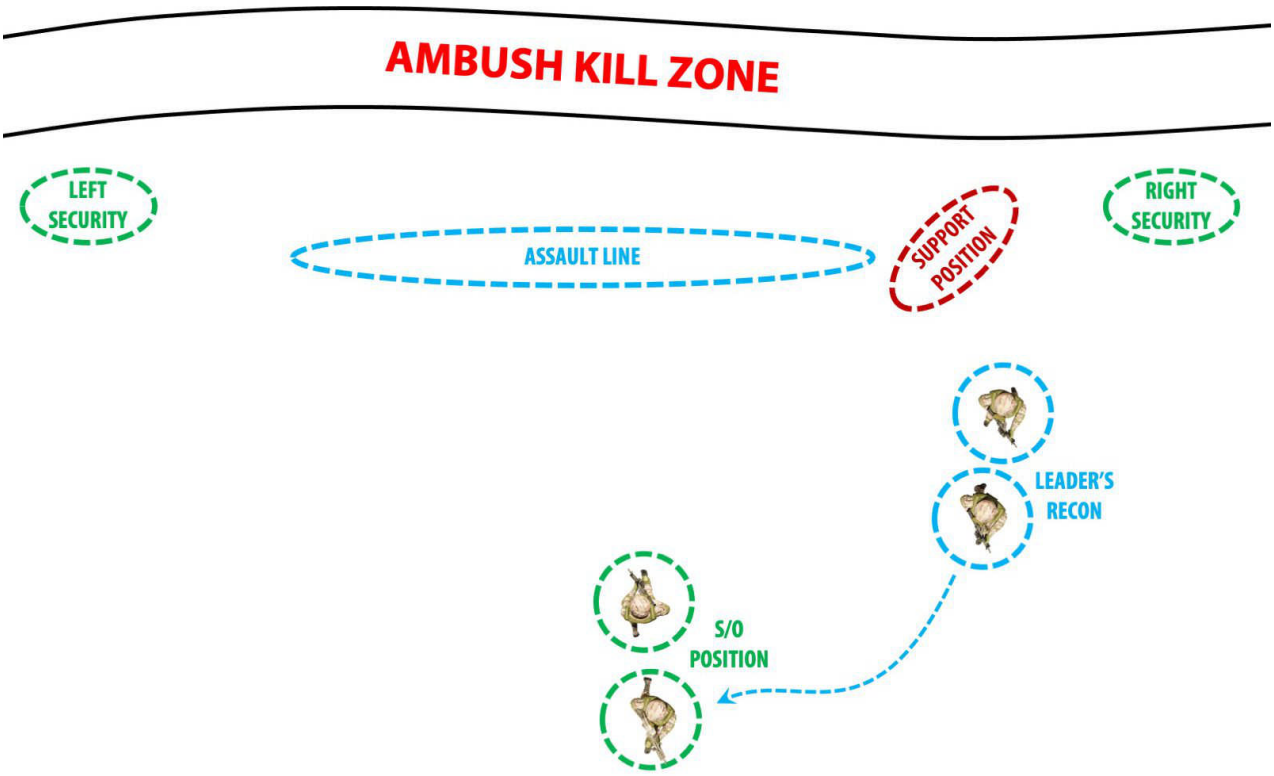
The first step is to identify a suitable ambush site and reconnoiter the objective area. If you have chosen a tentative ambush site using a map, the actual terrain might look very different than you expect. In particular, the location and orientation of roads may have changed. Therefore, you want to ensure you confirm a good spot for the ambush before bringing the entire unit or squad close to the objective, drawing attention, and possibly revealing your position. Even if you have intimate knowledge of the area and terrain and have visited the ambush site before, something may have changed since your last visit such as a fallen tree or the condition of the roads etc. It is therefore always a good idea to recon the ambush site if possible, prior to a mission. To recon the ambush site, a small element will move forward. Generally, the element will split at the objective area, leaving at least two troopers as a security/observation position while the leader and another trooper move forward to explore the area. The schoolhouse generally provides a list of "criteria" for a good ambush site, including things like the size and flatness of the kill zone, proximity of large trees for cover and the placement of antipersonnel mines. While such criteria provide some good general guidelines for establishing a linear ambush, in most cases these criteria are too rigid and do not always apply to the larger tactical situation. We will discuss more flexible and detailed approaches for choosing a good ambush site later.



SCHOOLHOUSE LINEAR AMBUSH: GENERAL OVERVIEW

STEP 2: Leader Identifies Tentative Positions for Unit

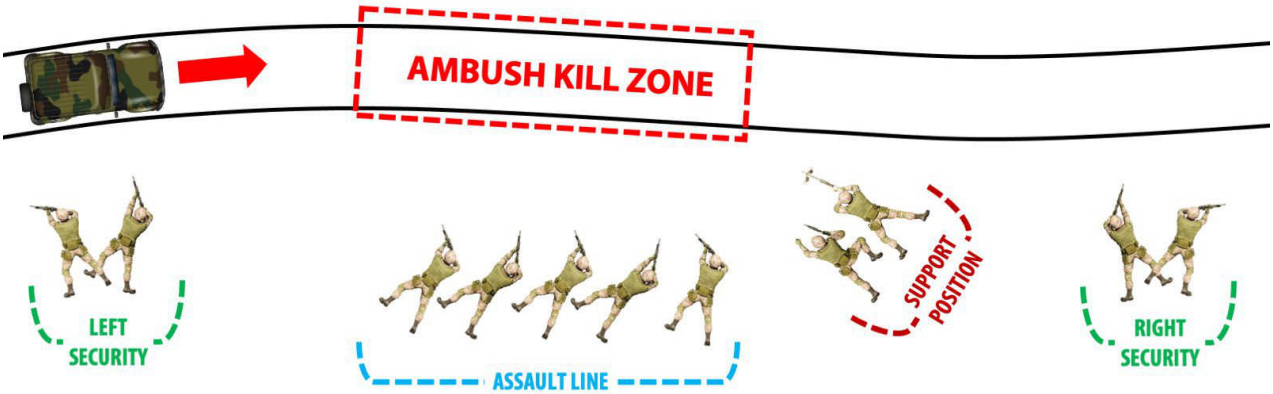
While conducting the recon, the leader is not just looking for a suitable ambush kill zone, he/she is identifying tentative positions for all of the various elements that will take part in the ambush. This includes identifying covered and concealed security positions with good observation and fields of fire down the road in either direction, an assault line, and a support position for the machine gun. The reason for identifying these positions early on is so that when the leader arrives with the rest of the unit, it will be easy to quickly guide the various elements into their respective positions. This will minimize the amount of time the unit spends exposed and close to the road during the ambush set-up process. If the leader has a digital camera (preferably with night vision capability), he/she can also take pictures of the ambush site to share with subordinates prior to returning to the objective. Once the leader's recon is complete, the recon element will move back to check in with the S/O position. The leader will then move back to pick up the rest of the unit, which is waiting nearby in an Objective Rally Point (ORP). The S/O will remain in place and observe the objective, ensuring no enemy forces come while the leader is gone and ensuring nothing else changes on the objective. The S/O will notify the leader of any problems or danger by radio.



SCHOOLHOUSE LINEAR AMBUSH: GENERAL OVERVIEW

STEP 3: Leader Guides the Unit Into the Ambush Position

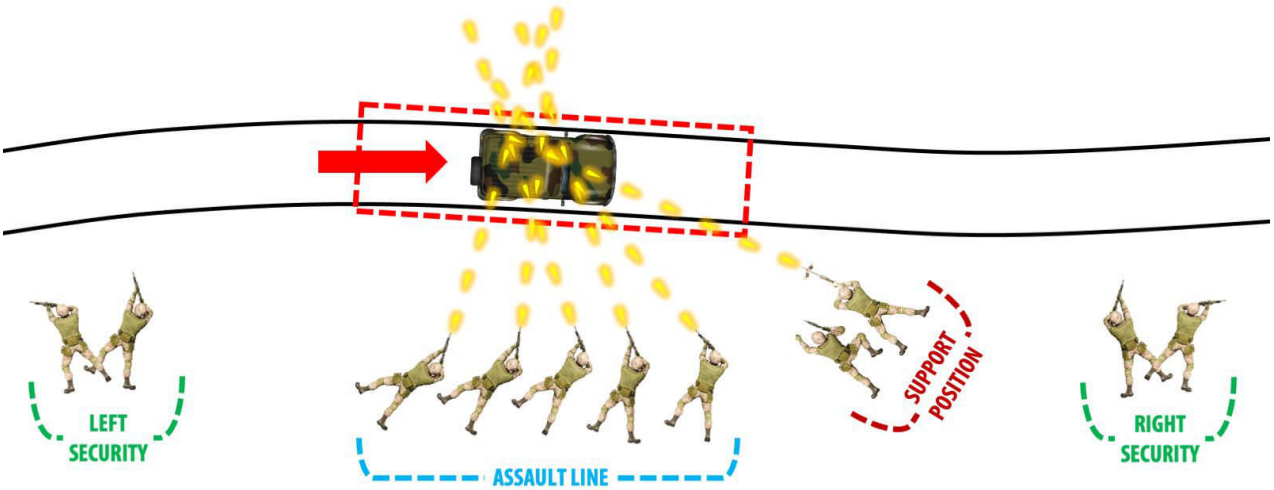
After picking up the rest of the unit, the leader will move back to the ambush site and first link up with the S/O position to confirm nothing has changed on the objective and no enemy have been detected in the area. The leader will then proceed to guide the security elements, assault element and support element into their respective positions. There are various ways to do this. The schoolhouse solution is often for the leader to tightly control all movement and micromanage the various elements, personally leading each element into position and assigning sectors of fire. Once the ambush is set the unit will remain in position and wait for the target to come down the road. When the security position first spots the target, it will notify the assault and support elements either by radio or other signal so they are prepared to engage. The support position must then positively identify the target to ensure it is the right target and not a civilian vehicle etc.



SCHOOLHOUSE LINEAR AMBUSH: GENERAL OVERVIEW

STEP 4: Initiate the Ambush

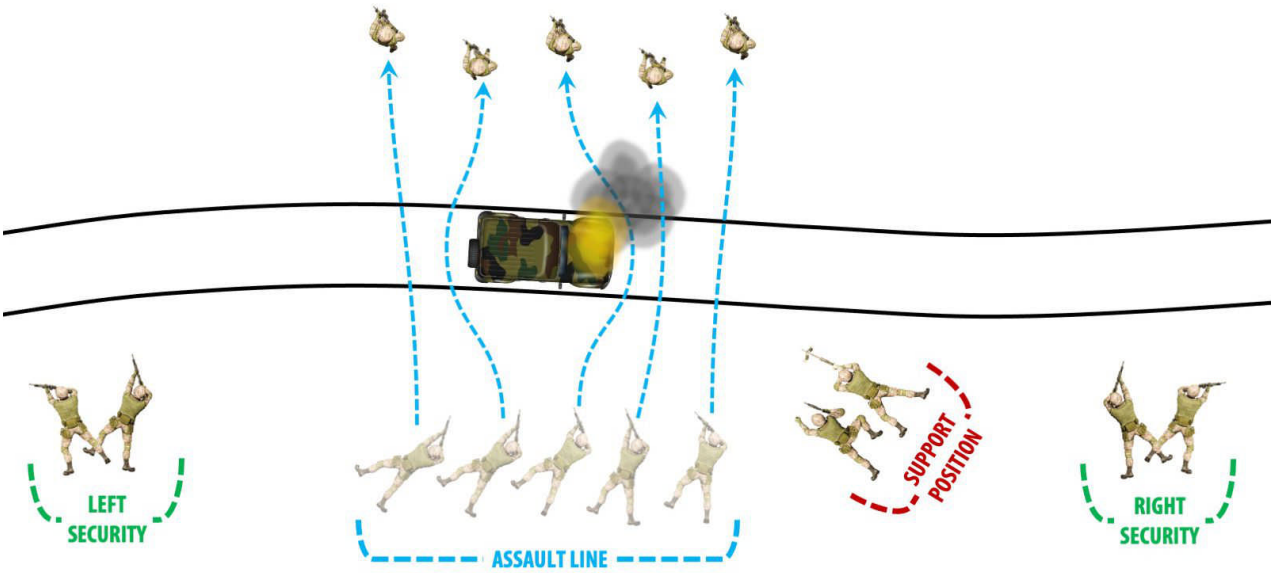
As the target enters the kill zone, the support and assault positions will open fire. It is often best to have several reference points so it is easy to see when the target has entered the kill zone regardless of lighting or weather conditions. By doctrine, a unit should initiate the ambush with the most casualty producing weapon. However, this can cause confusion because doctrine also dictates that you should not initiate an ambush with an open-bolt weapon like a machine gun since such weapons can jam easily and produce a tell-tale "click" when the bolt slams forward, alerting the enemy of your presence. The schoolhouse solution is generally to initiate the ambush with an M18 Claymore antipersonnel mine. We will discuss other options later on if your unit does not have a Claymore. Once the ambush is initiated, all troopers in the support position and assault line will engage with a high rate of fire. This generally involves having the machine gun (generally a medium machine gun in the support position and two light machine guns in the assault line) to fire on cyclic for one minute. This high rate of fire is supposed to overwhelm and destroy the enemy in the kill zone. Once it appears the enemy is destroyed all elements will cease fire and observe the kill zone for any sign of movement or resistance, engaging surviving enemies as needed. While the ambush is underway, the security elements will isolate the objective by engaging any forces that attempt to approach from either direction. This may involve moving closer to the road or moving from the original security position (better concealment) to a defensive position with better cover.



SCHOOLHOUSE LINEAR AMBUSH: GENERAL OVERVIEW

STEP 5: Assault the Objective

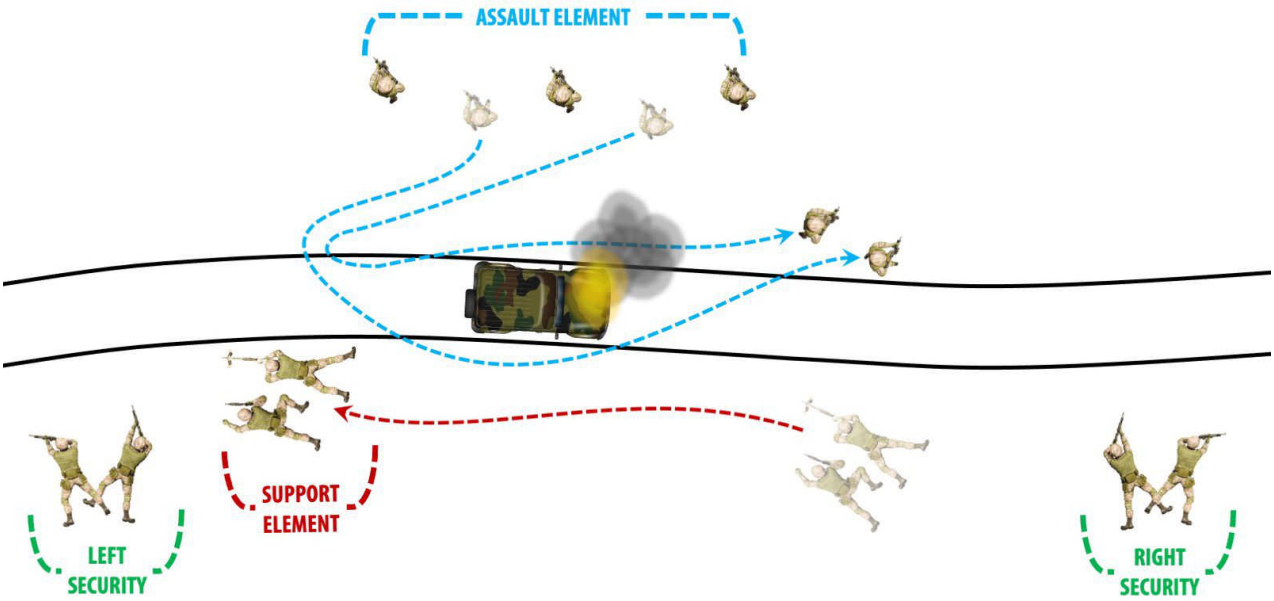
The support position will shift or cease fire while the assault element bounds through the objective, just as they would in any tactical maneuver or battle drill. The assault element will engage any surviving enemy as they move and clear inside any vehicles on the objective. The assault element will stop approximately one bound past the last identified enemy casualty to ensure all enemy are accounted for. This is important given that the purpose of conducting a close ambush and assaulting through the kill zone is generally to search dead enemies and gather intelligence.



SCHOOLHOUSE LINEAR AMBUSH: GENERAL OVERVIEW

STEP 6: Actions on the Objective

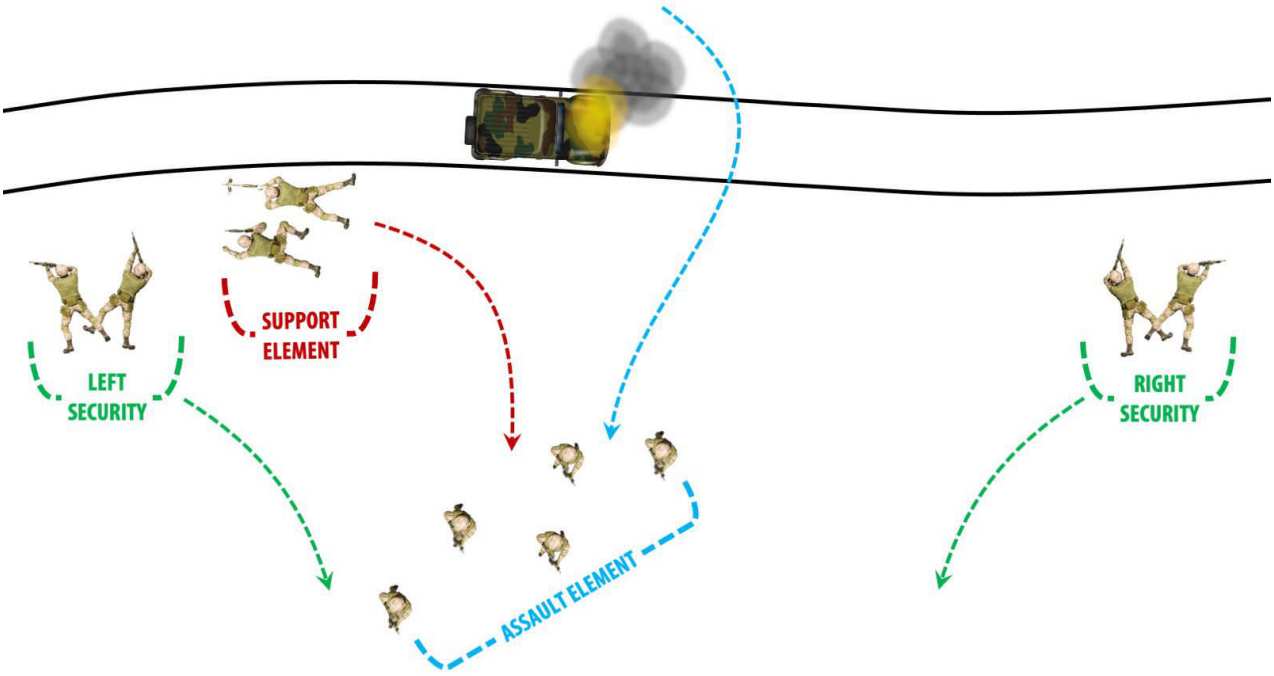
Once the assault element reaches the Limit of Advance (LOA) the unit's various specialty teams such as the Enemy Prisoner of War (EPW) and Aid/Litter will move back to the objective to restrain any living prisoners, search the dead and treat/evacuate any friendly casualties on the objective. There are a number of ways to do this and the schoolhouse generally provides specific search patterns and procedures for each trooper. The security and support positions may also reposition at this time to ensure the objective remains isolated and secure while the rest of the unit conducts actions on the objective.



SCHOOLHOUSE LINEAR AMBUSH: GENERAL OVERVIEW

STEP 7: Break Contact

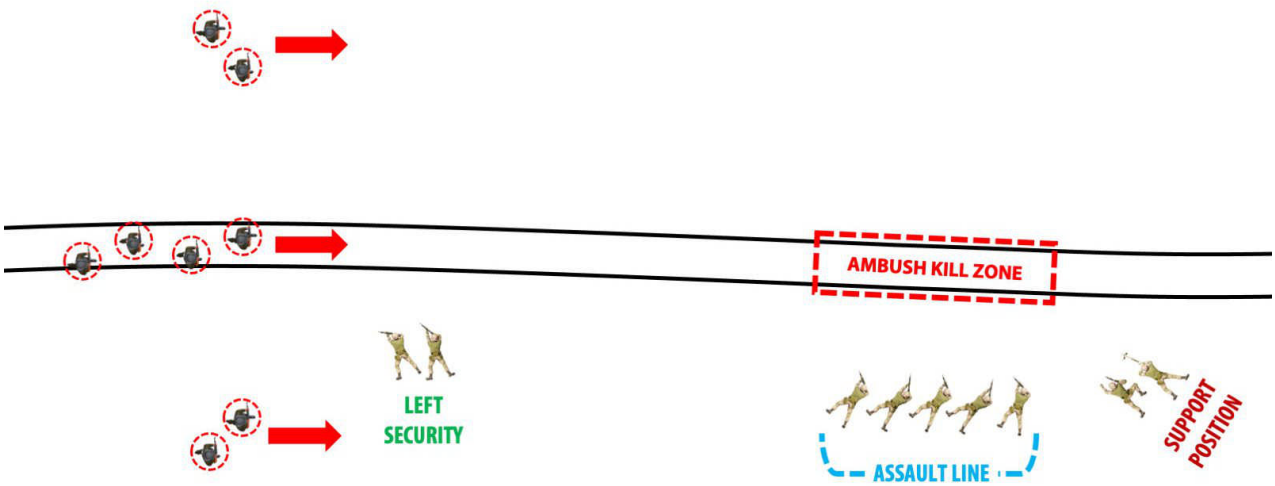
Once actions on the objective are complete, the unit will break contact and move away from the ambush site as quickly as possible. It is likely that the enemy forces that you ambushed radioed for help and there could be reinforcements or enemy artillery inbound to your position. The schoolhouse generally offers a fairly rigid sequence for breaking contact, with various elements pulling back one-by-one while several troopers rig explosives on any enemy weapons or equipment left on the objective. The security elements are generally the last to leave as the explosive fuse is burning. The unit will move back to the ORP or another rally point to avoid the enemy and prepare for follow-on missions.



SCHOOLHOUSE LINEAR AMBUSH: COMMON PROBLEMS

PROBLEM 1: Flankers

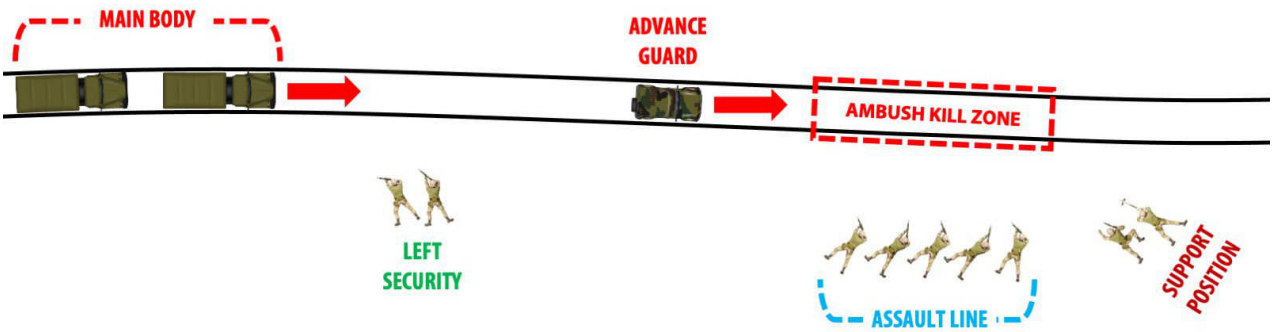
While the schoolhouse ambush is a good starting point for learning some of the fundamental concepts behind the ambush and small unit patrolling in general, it presents some problems if you try to apply it in a real combat situation against a skilled enemy. We will discuss enemy counter ambush tactics in more detail later but in simple terms, the enemy will most likely take steps to prevent you from ambushing him or to follow up and destroy your force should you succeed in initiating the ambush. One way the enemy might do this is by employing flankers on either side of a road march formation. Flankers can be used on either a foot march or mounted vehicle road march. Flankers might be employed during the entire movement or might deploy at certain times or locations when the enemy expects an ambush. Flankers are positioned to detect your security position and ambush line before the enemy walks into the kill zone.



SCHOOLHOUSE LINEAR AMBUSH: COMMON PROBLEMS

PROBLEM 2: Advance Guard

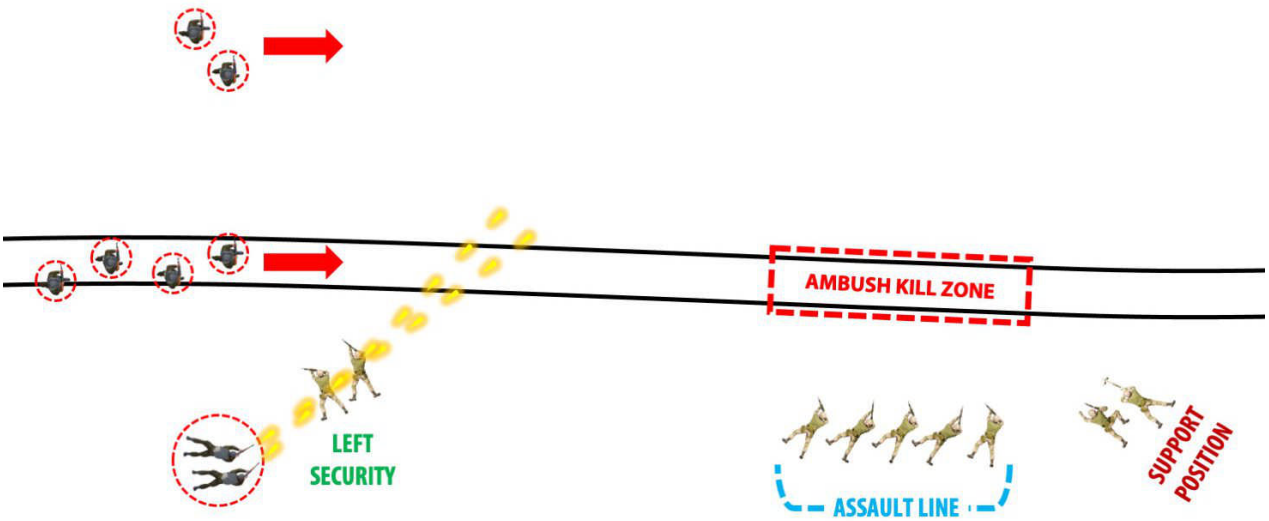
Another measure the enemy can take to help prevent ambush is employing an advance guard. An advance guard moves ahead of the main body to scout for threats and ambush positions. If the enemy has any night vision equipment or other optics/sensors it is likely they will provide them to the advance guard. If the advance guard detects anything suspicious it will signal the main body to stop. At this point, the enemy might deploy flankers to check the area. Therefore, an advance guard and flankers can be used in combination. An advance guard can be used in either dismounted foot marches or mounted road marches. In some cases, it provides less security than flankers but it generally allows for faster movement, especially in a vehicle road march. As the ambushing force, if you see the advance guard enter your kill zone, you will most likely not engage and hope that your ambush line remains undetected. However, by not engaging you give the enemy more time to detect you and surrender the initiative should the enemy decide to dismount and maneuver against you.



SCHOOLHOUSE LINEAR AMBUSH: COMMON PROBLEMS

EXAMPLE: Flankers Engage Security

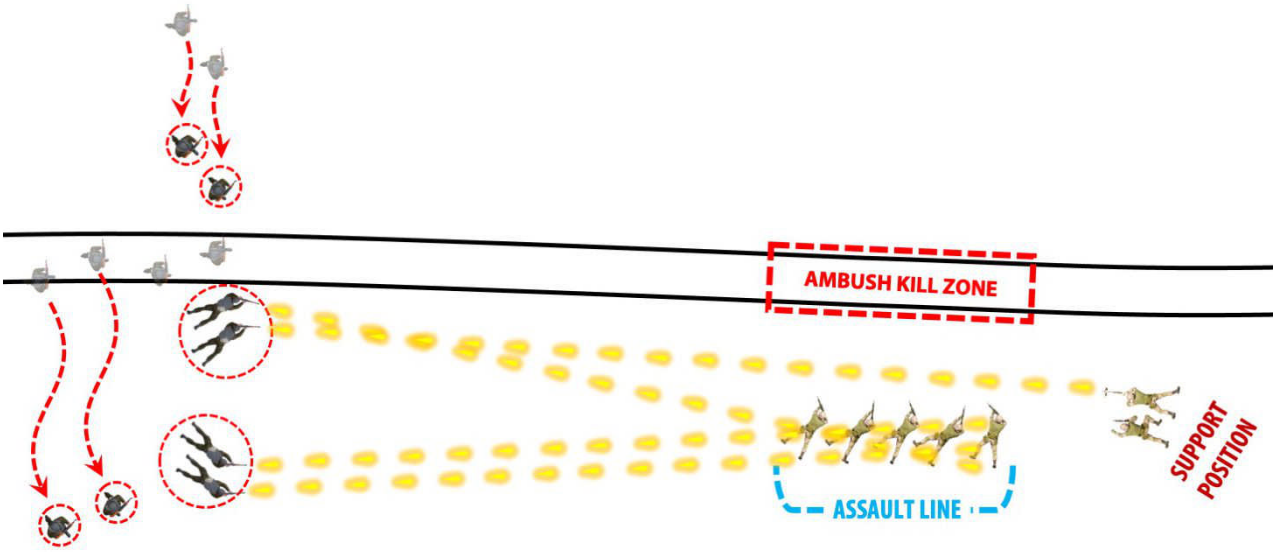
To further examine how a schoolhouse linear ambush can cause problems in a real-world combat situation, consider the following example. An enemy formation with flankers is moving down the road towards your ambush position. The enemy flankers detect your security position and open fire, killing your security element. Even if your security element succeeds in engaging or destroying the enemy flankers, your position will still be compromised and the remainder of the enemy force will still be able to maneuver on you.



SCHOOLHOUSE LINEAR AMBUSH: COMMON PROBLEMS

EXAMPLE: Enemy Achieves Enfilade Fire

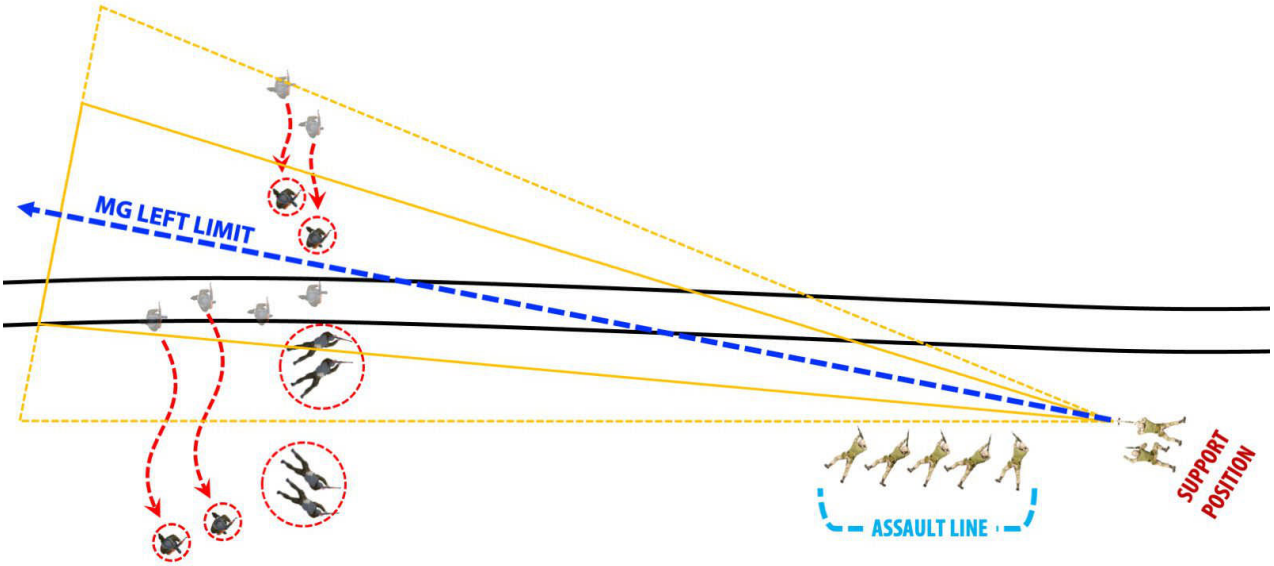
After the enemy flankers destroy your security element, the rest of the enemy force will move off the road to safety. Having compromised your security element, the enemy will anticipate that your ambush position is ahead. They will be on the lookout as they continue to advance. Once they spot your ambush line they will open fire. Because their fire will be passing through the long axis of your linear ambush formation, the enemy will be achieving enfilade fire and your formation will be very vulnerable.



SCHOOLHOUSE LINEAR AMBUSH: COMMON PROBLEMS

EXAMPLE: Your Support Position Cannot Return Fire

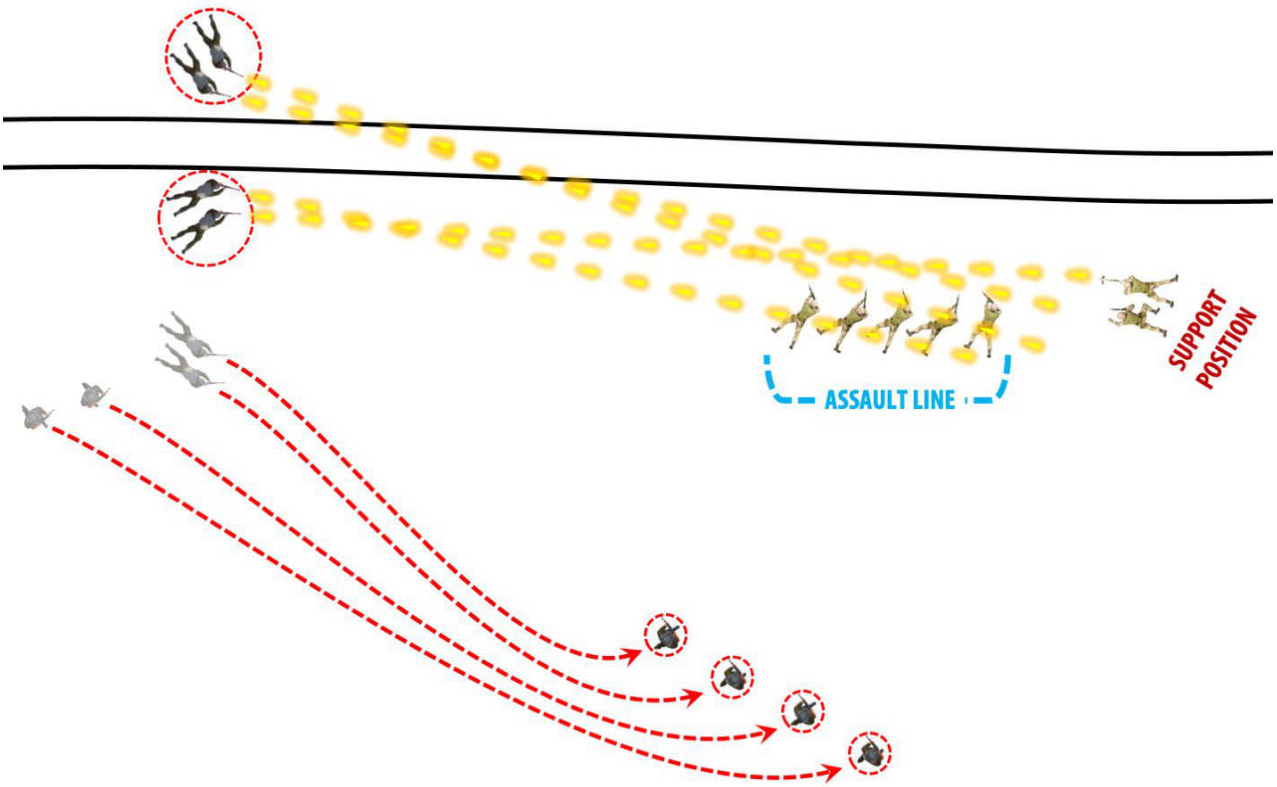
Because of the orientation of the assault line to the support position in a schoolhouse linear ambush, it will likely be difficult for your machine gun to engage the enemy without risking shooting your own troops. The orange lines below show the surface danger zone angles used for planning safe and effective machine gun fire. The solid lines show the 5-degree bullet dispersion angle and the dotted lines show the 10-degree ricochet zone. The dotted blue line shows the machine gun's left limit of fire based on these safety planning angles and the position of the assault line. As you can see, the machine gun is unable to engage the majority of the enemy formation safely. It is possible to move the assault line but this could be difficult under fire, especially if some of the troopers on the assault line are wounded. Therefore, while the enemy can achieve enfilade fire on your forces, you are largely unable to fight back effectively with your machine gun.



SCHOOLHOUSE LINEAR AMBUSH: COMMON PROBLEMS

EXAMPLE: Enemy Flanks Around

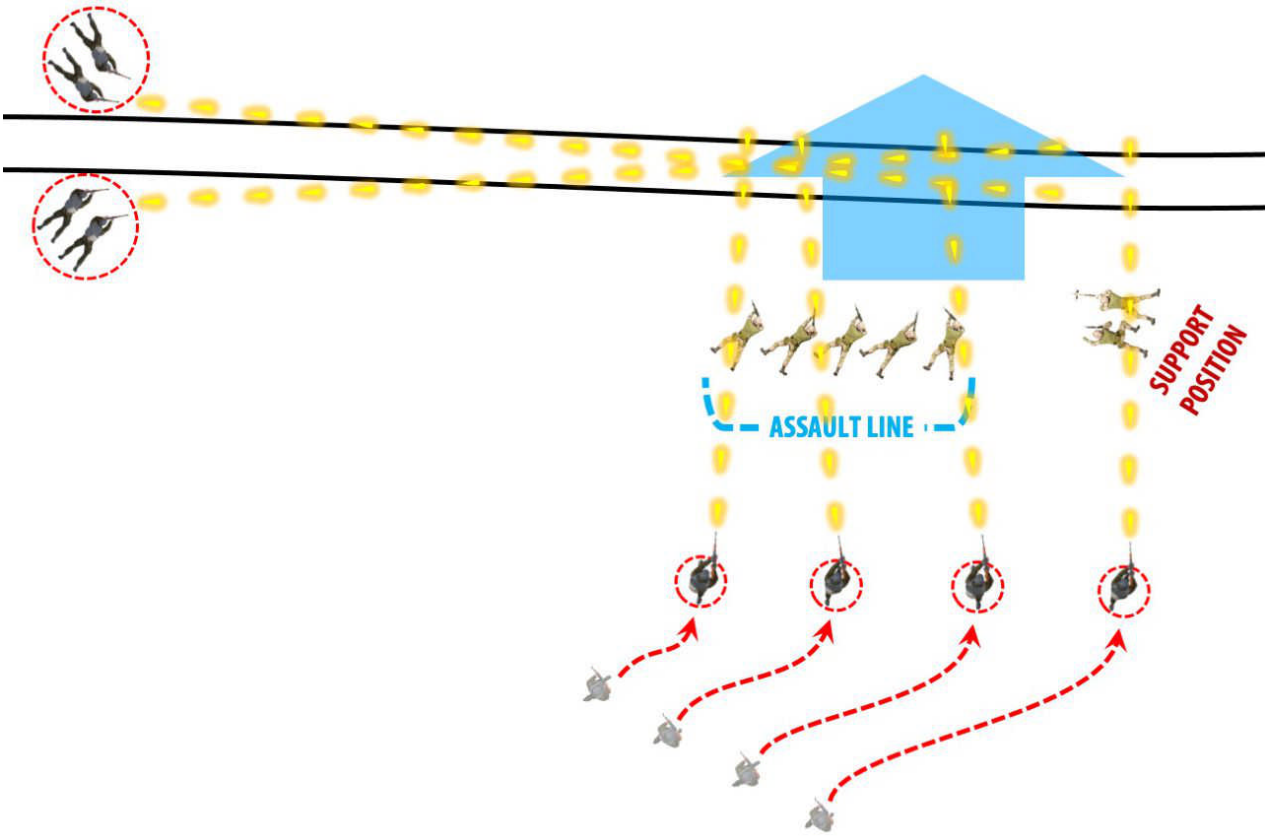
As enemy forces on both sides of the road suppress your assault line and support position, the remaining enemy flank around behind your assault line. Note that while this example uses an enemy formation with flankers, an enemy employing an advance guard could execute a similar maneuver. Once the advance guard detected your formation, enemy machine guns would suppress you either by dismounting from the convoy or firing from the lead vehicles. Additional dismounts could then move around and flank just like in the diagram below.



SCHOOLHOUSE LINEAR AMBUSH: COMMON PROBLEMS

EXAMPLE: Enemy Assaults Your Position

Once the enemy flanks around the assault position, you will be under fire from two directions. Even worse, as the enemy assaults through, you will have no place to pull back safely and your only option might be to cross the road. If the enemy is smart, he will have placed one or more machine guns firing along the road, ready to cut down your forces as you cross in a "hammer and anvil" maneuver. In short, if you execute a schoolhouse linear ambush in a real combat situation against a competent enemy it is likely that your force will encounter at least some of the problems described in this section. However, there are more effective ways to execute a linear ambush that increase your chances of success. There are also other, non-linear ambush formations that can prove useful in some situations.



AMBUSH FUNDAMENTALS
Ambush Formations

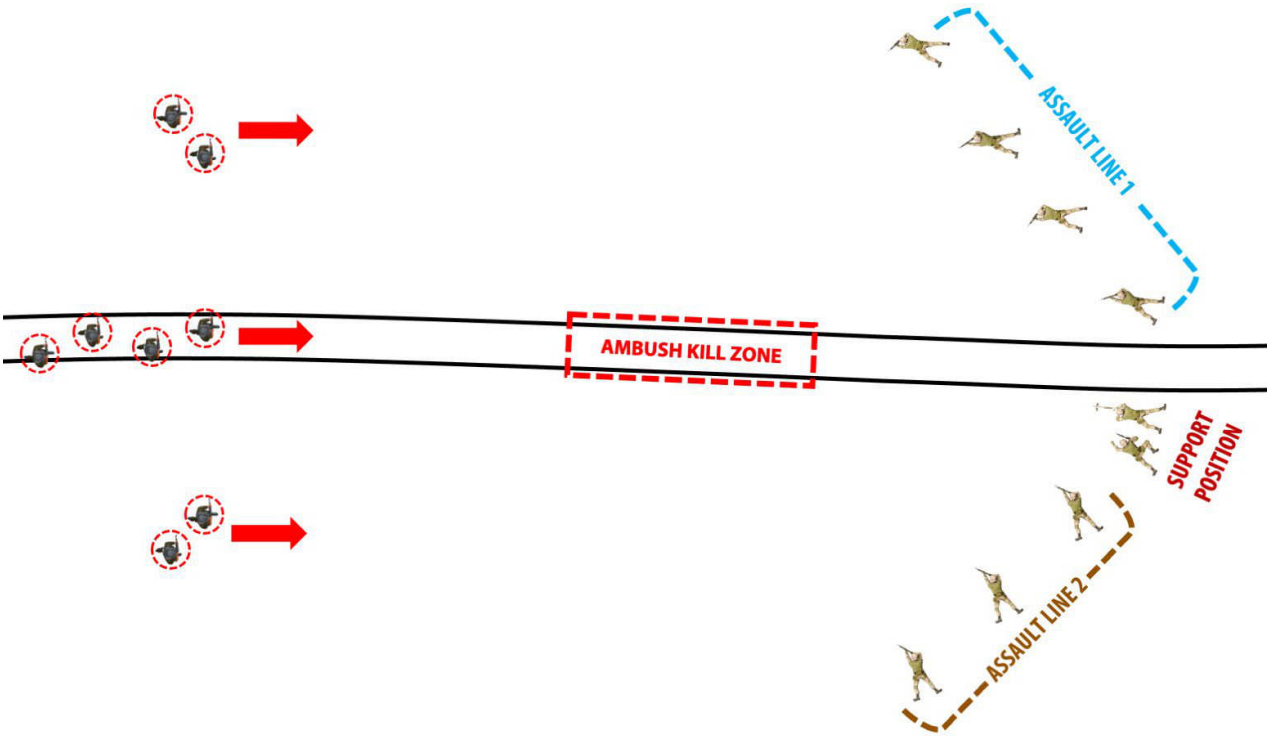
Ambush formations dictate how various elements are arrayed around the kill zone. Formations each have advantages and disadvantages depending on the tactical situation and what your ambush is trying to accomplish. There is no one formation that is superior to others in all cases. In addition, formations are just guidelines for how to position troopers in the ambush, we recommend that you adjust any of the following formations as needed to ft your specific tactical requirements. For example, there is nothing to say that you cannot adjust the angle of the line in a linear ambush to orient the unit's weapons towards a specific direction or threat. There is nothing to stop you from using only one half of the V-Shape formation if you prefer not to cross the ambush road.

Therefore, the following formations are intended only as examples, starting points, or building blocks for developing an ambush plan that fits your specific mission requirements. In addition to explaining the general setup and principles behind each formation we also discuss some key advantages and disadvantages of the various options to help you decide which formation is appropriate for a given tactical scenario. The formations covered in this section include the V-Shape, L-Shape, Z-Shape, Y-Shape and X-Shape ambush formations. This section does not go into additional detail on the linear ambush formation since we already covered the linear ambush in the previous section.

AMBUSH FORMATIONS: V-SHAPE AMBUSH

General Overview

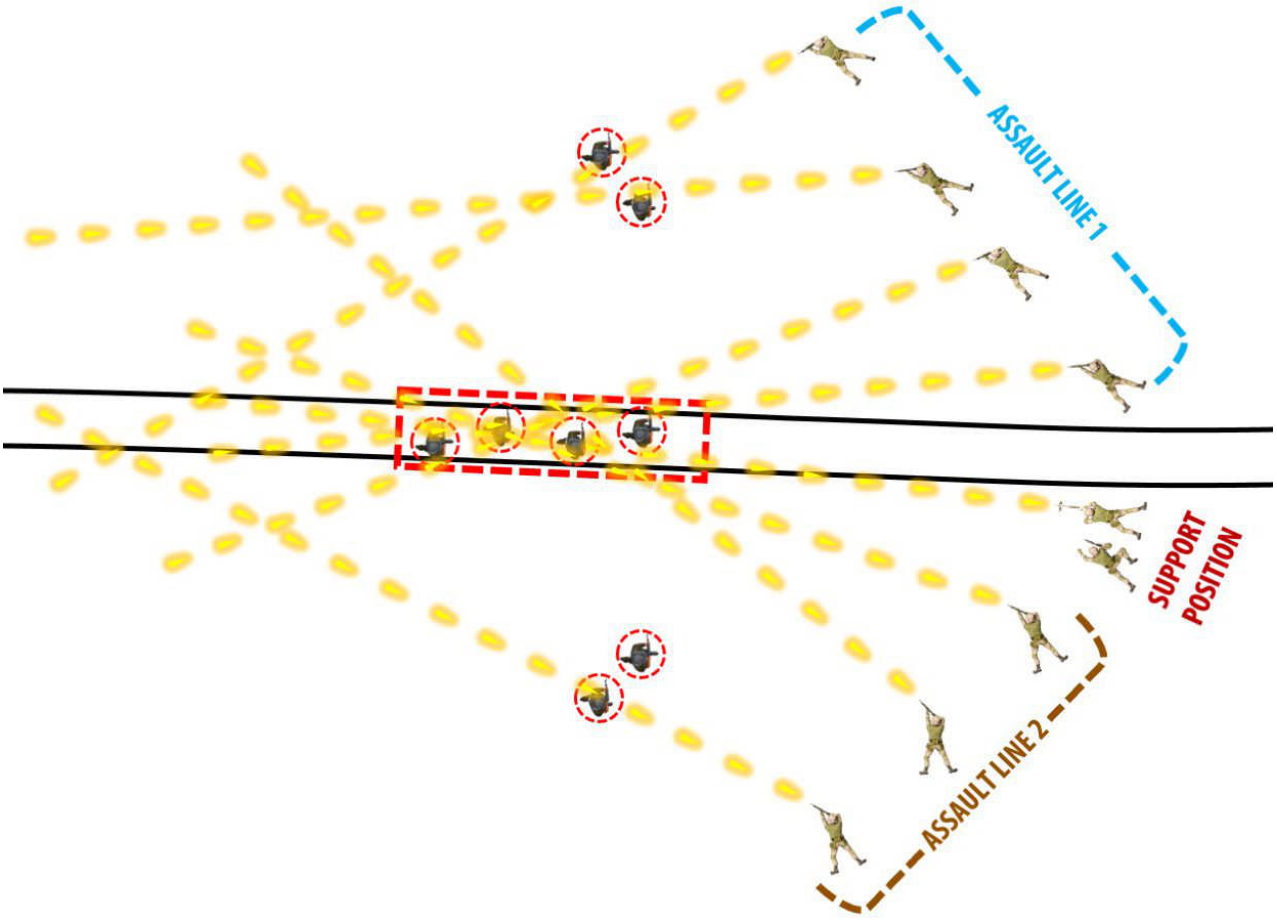
The V-Shape ambush offers some advantages over the linear ambush particularly when it comes to dealing with enemy formations that employ flankers and/or advanced guards. When setting up in the V-Shape formation, it is generally best to place your machine guns (including your light machine guns if you have them) close to the road. This will mean your machine guns are firing straight down the road and through the long axis of the enemy march formation, thereby achieving enfilade fire. You can then expend the rest of your troopers out to either side. Lining troopers up in a "V" (as opposed to a straight line perpendicular to the road) makes it easier for fields of fire to interlock across the kill zone and offers better visibility for the troopers on the end of each line since they are slightly closer to the road than they would be if the formation was a straight line. The main disadvantage of the V formation is that it is only effective against one direction of approach, and it is generally not safe to place security forward of the V since they will be in the line of fire of your machine gun. V formations generally use only rear security and rely on the formation itself to provide its own front security. You also need to be very careful that the two assault lines do not shoot each other. If a fast-moving enemy gets too close, the two assault lines on either side of the road can accidentally shoot through enemy vehicle and risk friendly fire. Therefore, when using the V formation, it is critical to establish clear left and right limits for every shooter in order to ensure safety.



AMBUSH FORMATIONS: V-SHAPE AMBUSH

Response to Flankers

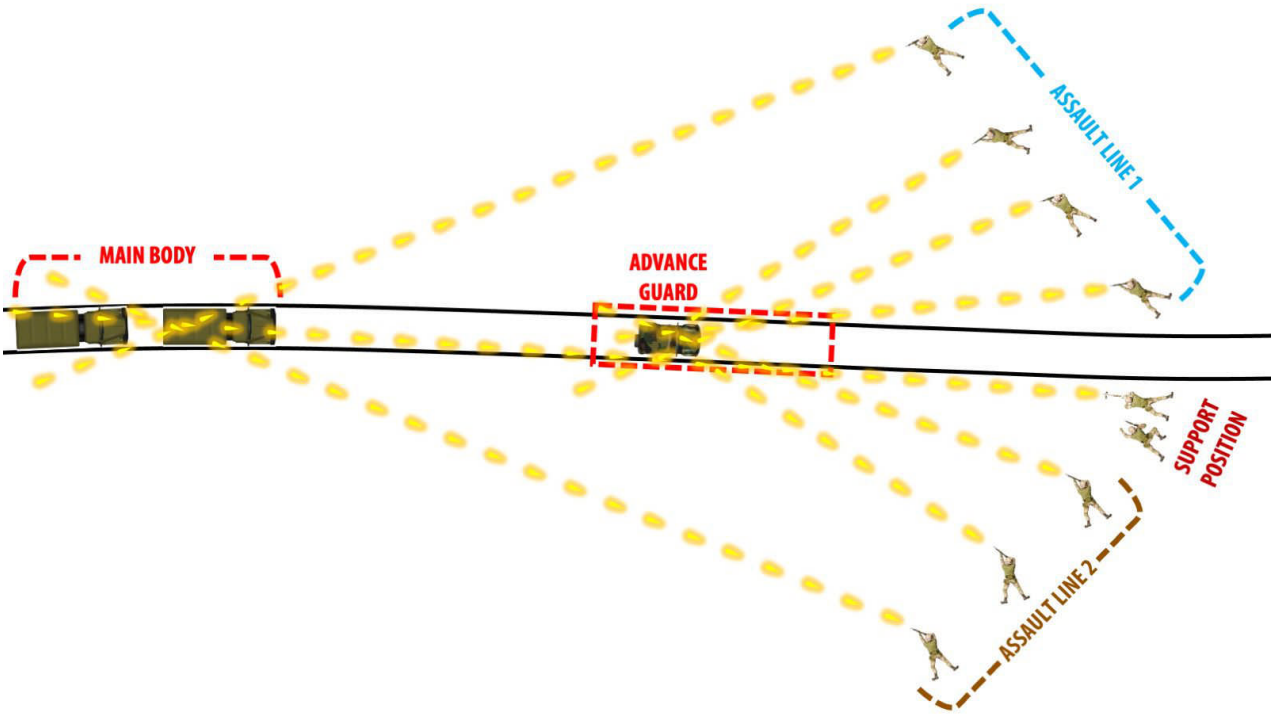
The diagram below shows how a V-Shape ambush responds to a formation with flankers. Some of the troopers are in position to engage and fix the flankers while the rest of the formation engages enemies in the kill zone. Because the kill zone is further away from your ambush position than it was in the linear ambush and there is no security position to the front, it is less likely the flankers will compromise your ambush before the main body reaches the kill zone as demonstrated in the linear ambush. It is generally possible to engage the flankers and main march formation simultaneously as in the diagram below. Once again, the machine gun close to the road is extremely effective since it achieved enfilade fire through the long axis of the enemy march formation. It is also much harder for the enemy to flank your ambush position as they did against the linear ambush since you have a great deal of firepower oriented to the front.



AMBUSH FORMATIONS: V-SHAPE AMBUSH

Response to Advance Guard

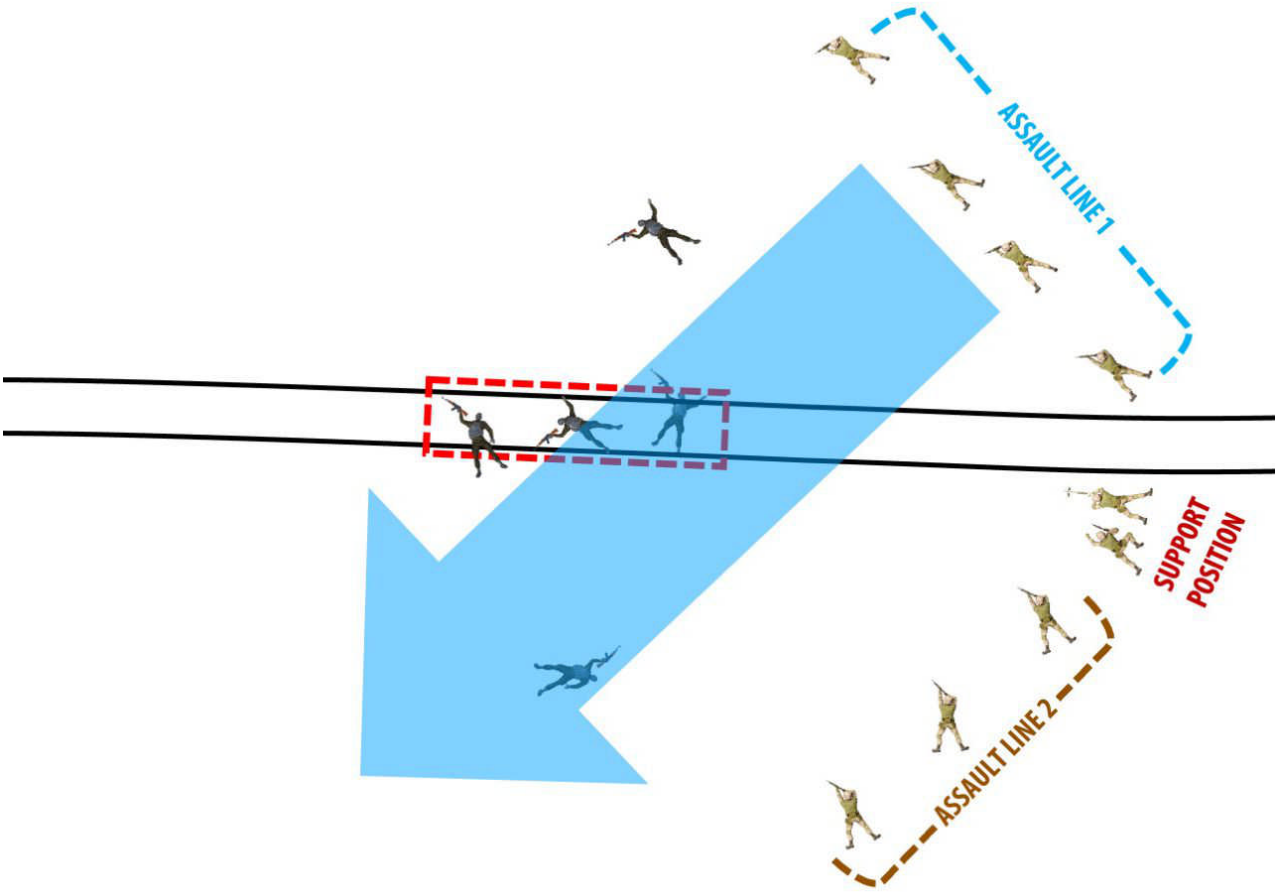
The V formation is also generally more effective against an enemy with an advance guard. As with the linear ambush, you may decide to lie low and allow the advance guard to pass through the kill zone, allowing you to wait for the more valuable targets in the main body. However, this can be risky especially when using the V formation. If the advance guard stops directly between or just past your two assault lines it will be difficult for the assault lines to engage without accidentally shooting each other. If you choose to engage the advance guard in the kill zone, unlike the linear ambush you can generally still engage the rest of the formation further down the road, even if they are not in the kill zone. As pictured in the diagram below, some troopers from each assault line can engage the near target and others can engage far. You can assign specific sectors and engagement priorities when setting up the ambush. The machine gun fire will travel far down the road, engaging both the advance guard and the main body.



AMBUSH FORMATIONS: V-SHAPE AMBUSH

Assaulting in Either Direction

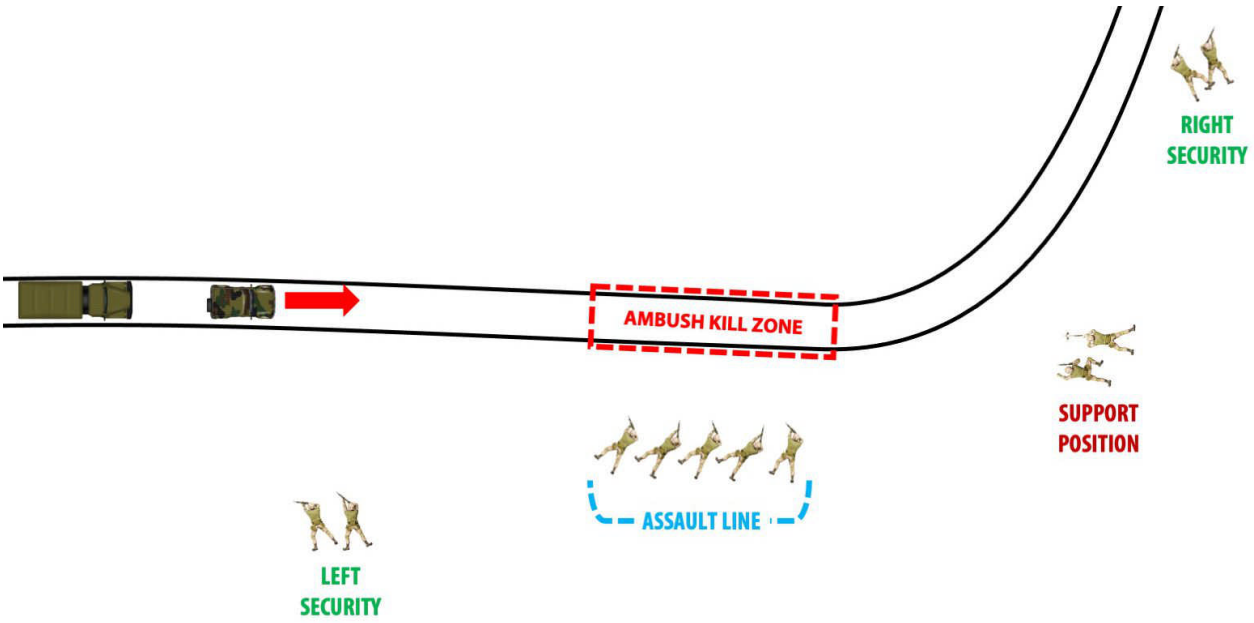
Another advantage of the V formation is that you can assault through the objective with either assault line. In the diagram below assault line 1 (blue) assaults through but you could also have assault line 2 (brown) assault through in the same way. This allows for quick withdrawal from the ambush site on either side of the road. Also note that when you are emplacing the V-Shape ambush or breaking contact after the ambush is complete, remain aware of any tracks you leave going across the road, especially if the enemy has advanced tracking skills. This same rule applies to any ambush formation or technique that requires you to cross a road before or after the ambush.



AMBUSH FORMATIONS: L-SHAPE AMBUSH

General Overview

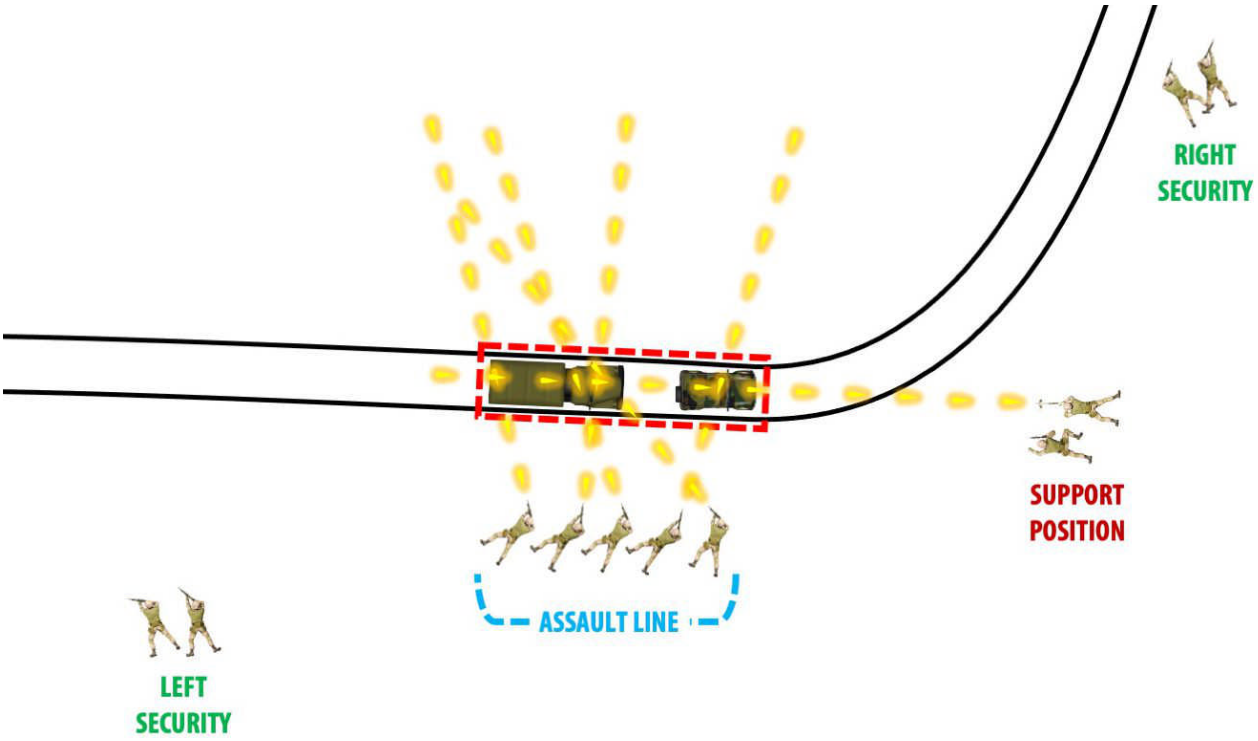
You can employ the L-Shape ambush formation when you set up the ambush on a bend in the road. The L-Shape formation offers a number of advantages. It is important to remember that most bends in the road are not tight 90-degree turns but rather more gradual bends. You can still employ the L-shape ambush formation even if the bend in the road is gradual.



AMBUSH FORMATIONS: L-SHAPE AMBUSH

Enfilade Fire and Tactical-L

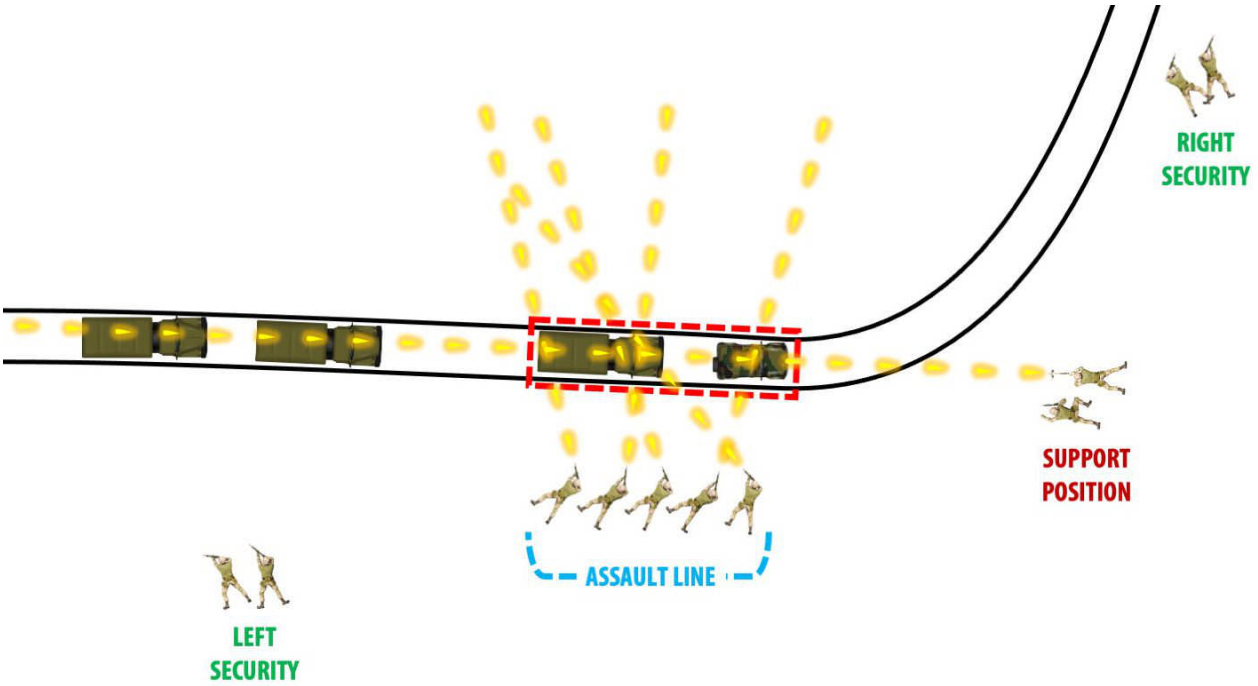
As shown in the diagram below, the L-shape makes it easier for you to achieve enfilade fire with your machine gun, firing directly down the long axis of the enemy formation as it marches down the road. Note that the left side security position is emplaced slightly farther from the road to ensure it is not in the dispersion/ricochet zone from the machine gun's cone of fire. Also, by definition, the L-shape formation also allows you to achieve a "tactical-L" where the enemy is taking fire from multiple angles, making it more difficult for the enemy to take cover.



AMBUSH FORMATIONS: L-SHAPE AMBUSH

Engaging an Advance Guard or Multiple Elements

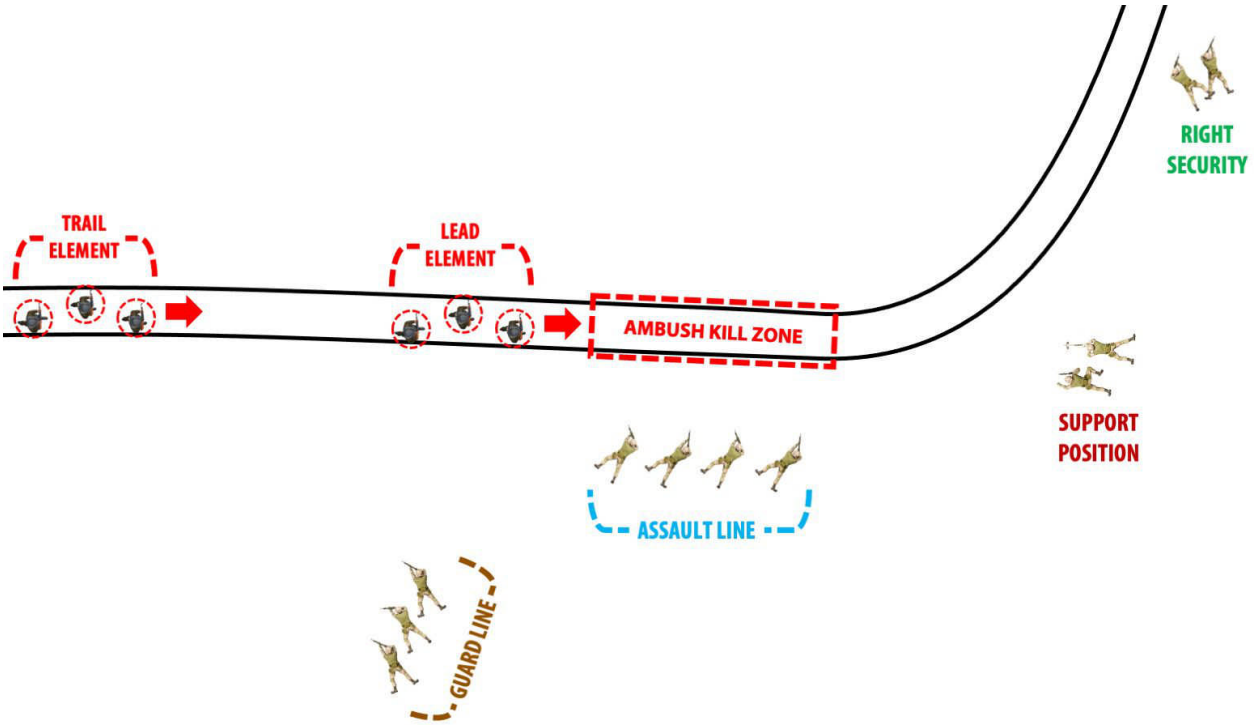
Because the machine gun is firing directly down the road, it can engage elements further down the road before they reach the kill zone. This can allow you to simultaneously engage an advance guard element as well as the march formation's main body, just as you did using the V formation. The same principle also applies to convoys with multiple elements or echelons moving one behind the other.



AMBUSH FORMATIONS: Z-SHAPE AMBUSH

General Overview

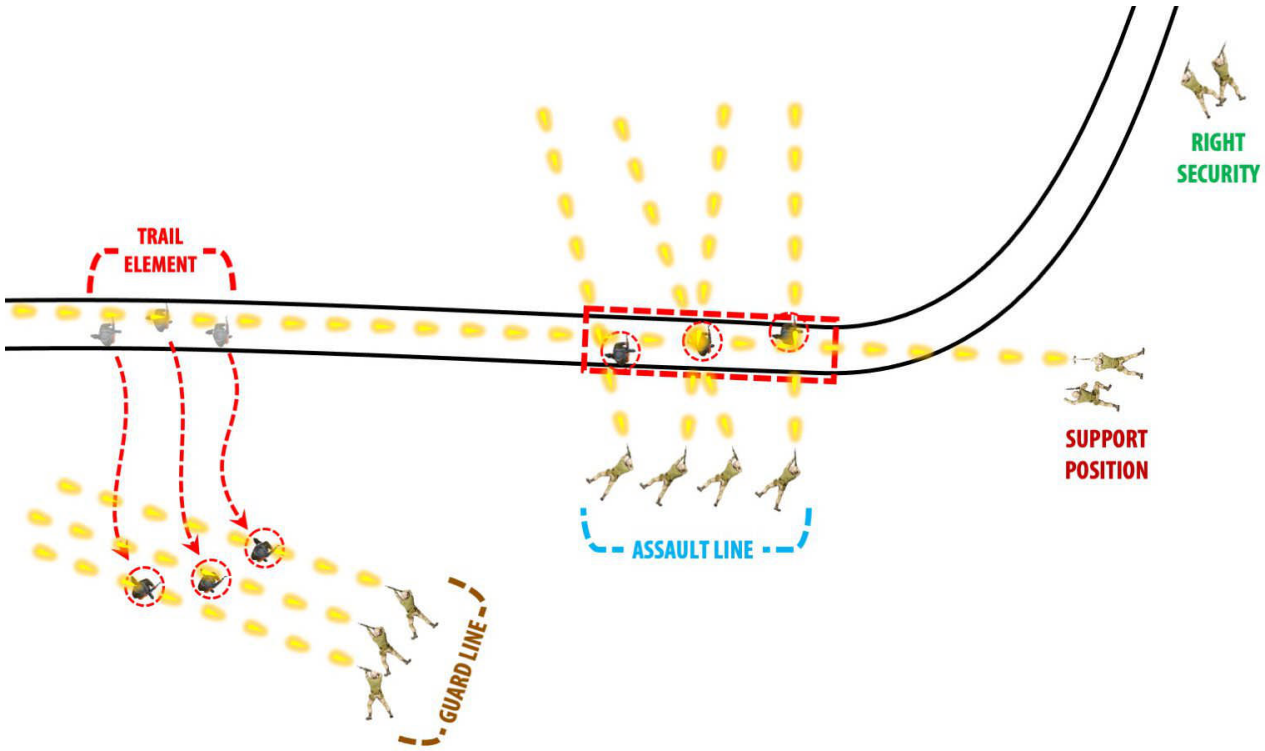
The Z-Shape ambush is designed to avoid the problem of the enemy flanking your ambush position as discussed in the previous section. The Z formation calls for emplacing an additional guard line or ambush position to intercept an attempted enemy flanking movement. Generally, this guard line will take the place of one of the security elements since it will not be able to fire at flanking enemies safely if there is an additional friendly position further to the front. In the diagram below, the Z-Shape formation is built off of a L-Shape ambush. However, you can apply the same principles to a linear ambush at it could still be called a "Z-Shape" ambush even though it wouldn't look as much like a Z. The Z ambush concept simply involves placing the guard line in front of the assault line to guard against a flank.



AMBUSH FORMATIONS: Z-SHAPE AMBUSH

Responding to a Flanking Element

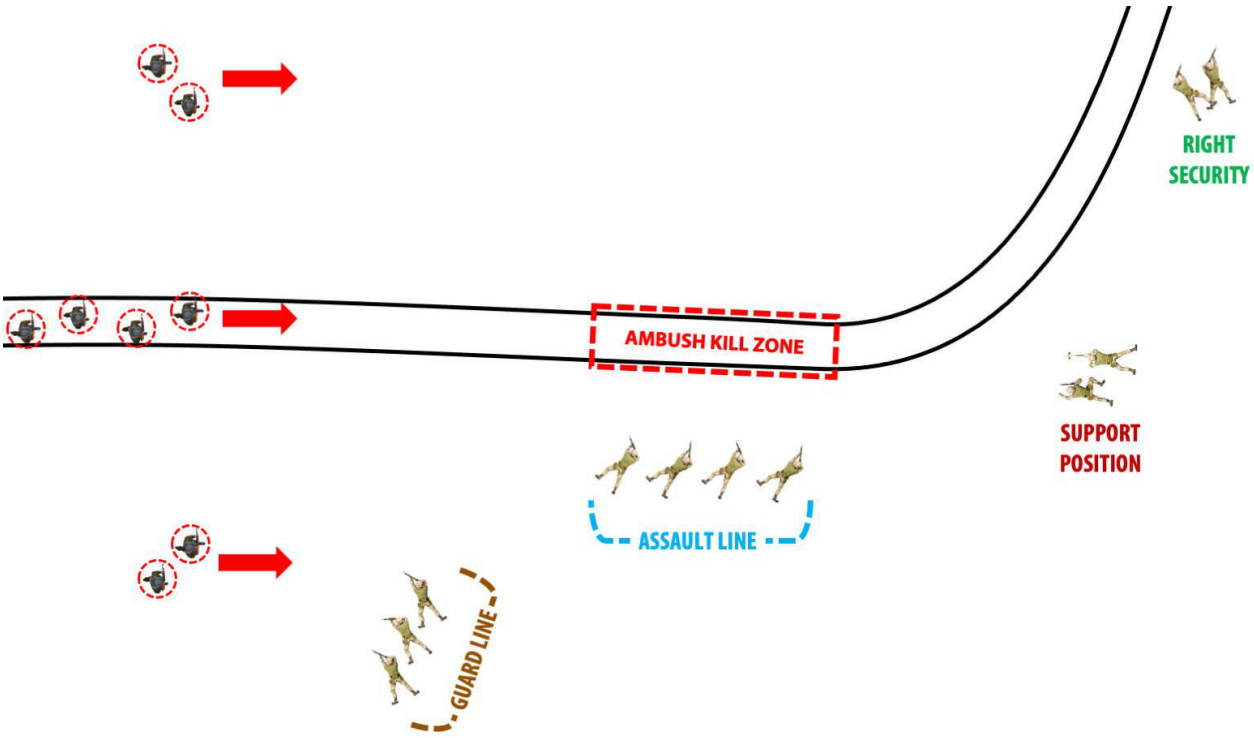
The Z-Shape ambush is most effective against an enemy march formation with an advance guard or multiple elements. In this situation, you engage the lead element in the kill zone but there is still one or more elements further back that move off the road and attempt to flank your ambush line. As the flanking element moves forward it will encounter your guard line and either be destroyed or forced to stop.



AMBUSH FORMATIONS: Z-SHAPE AMBUSH

Responding to Flankers

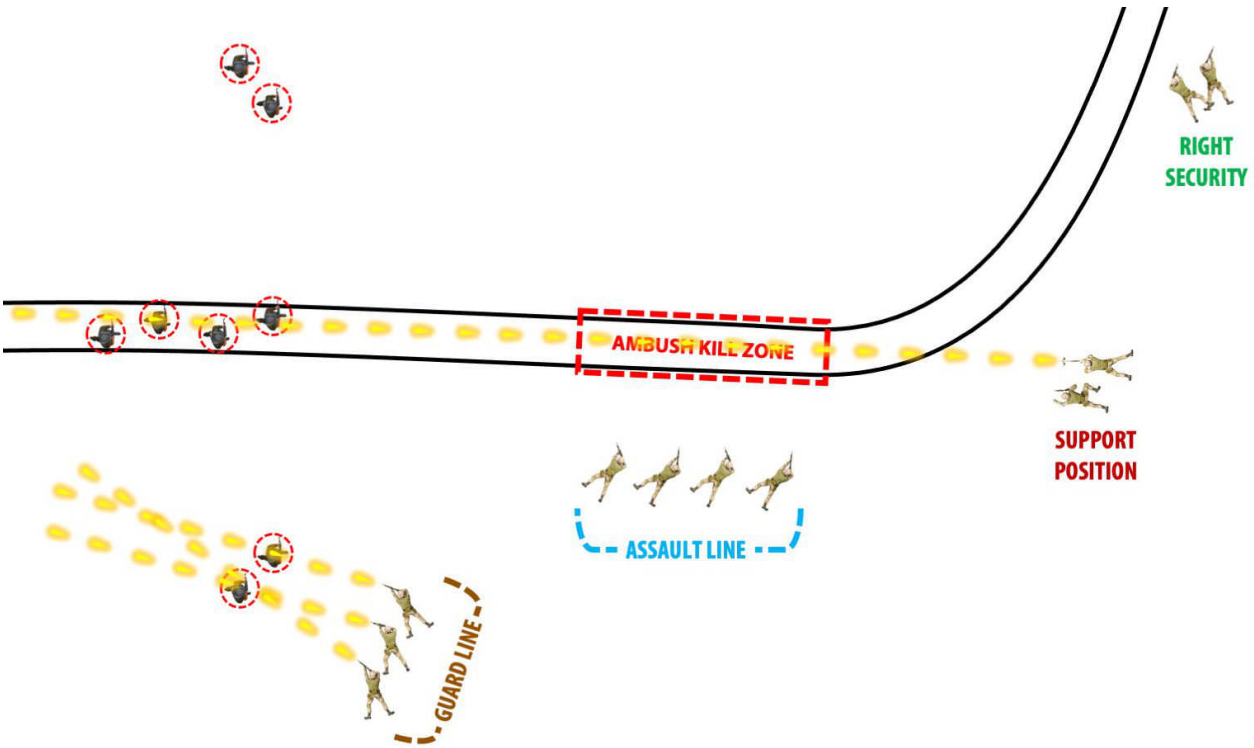
The Z-Shape ambush is also better for responding to flankers since your guard line can detect and engage the flankers early, thereby helping to protect your main assault line. In this case, the guard element is essentially a stronger security element that is more capable of actually engaging and destroying the enemy flankers.



AMBUSH FORMATIONS: Z-SHAPE AMBUSH

Engaging Flankers and the Main Body

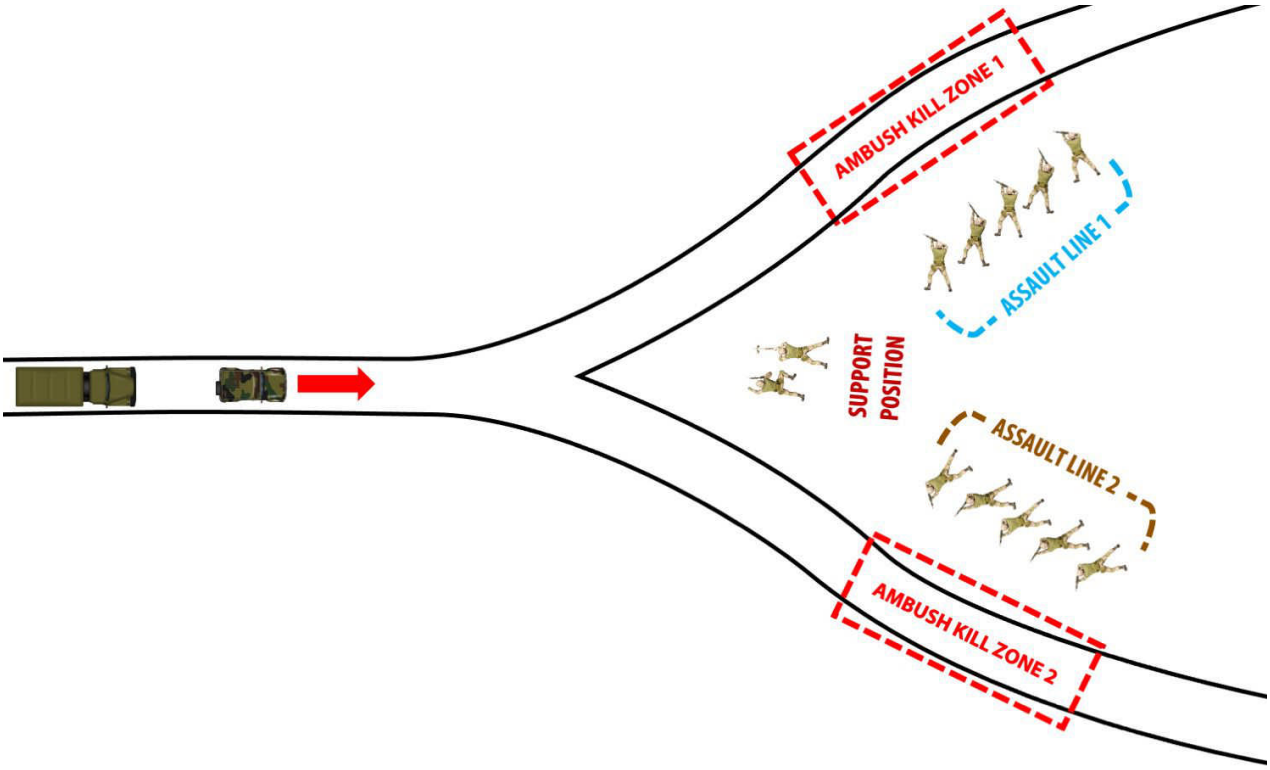
Unlike the scenario responding to an advance guard or multiple element formation, if the enemy is employing flankers, you will most likely not be able to draw enemy forces into the kill zone since the flankers will detect your guard line before they reach the kill zone. This means that your assault line will not be in as good a position to engage. However, if you have employed your machine gun in an L-shape ambush configuration it may still be able to engage enemies further down the road with enfilade fire.



AMBUSH FORMATIONS: Y-SHAPE AMBUSH

General Overview

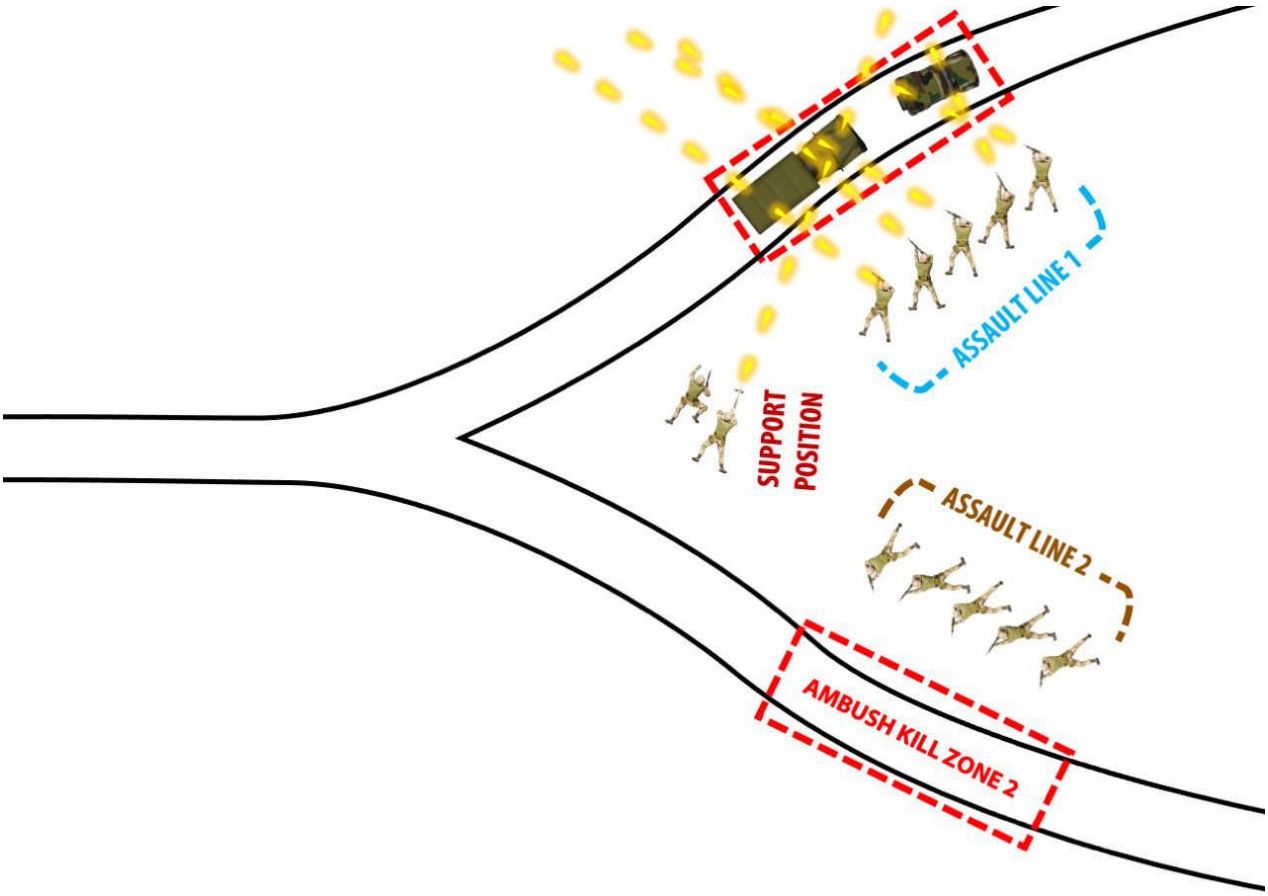
There are a number of ways to employ the Y-Shape formation concept but the general idea is that you emplace the ambush at a fork in the road because you are not sure which path the enemy is going to take. In the example below, you set up two separate kill zones and two separate assault elements but a single support element facing down the main road leading to the Y intersection.



AMBUSH FORMATIONS: Y-SHAPE AMBUSH

Engaging an Enemy that Turns Left or Right

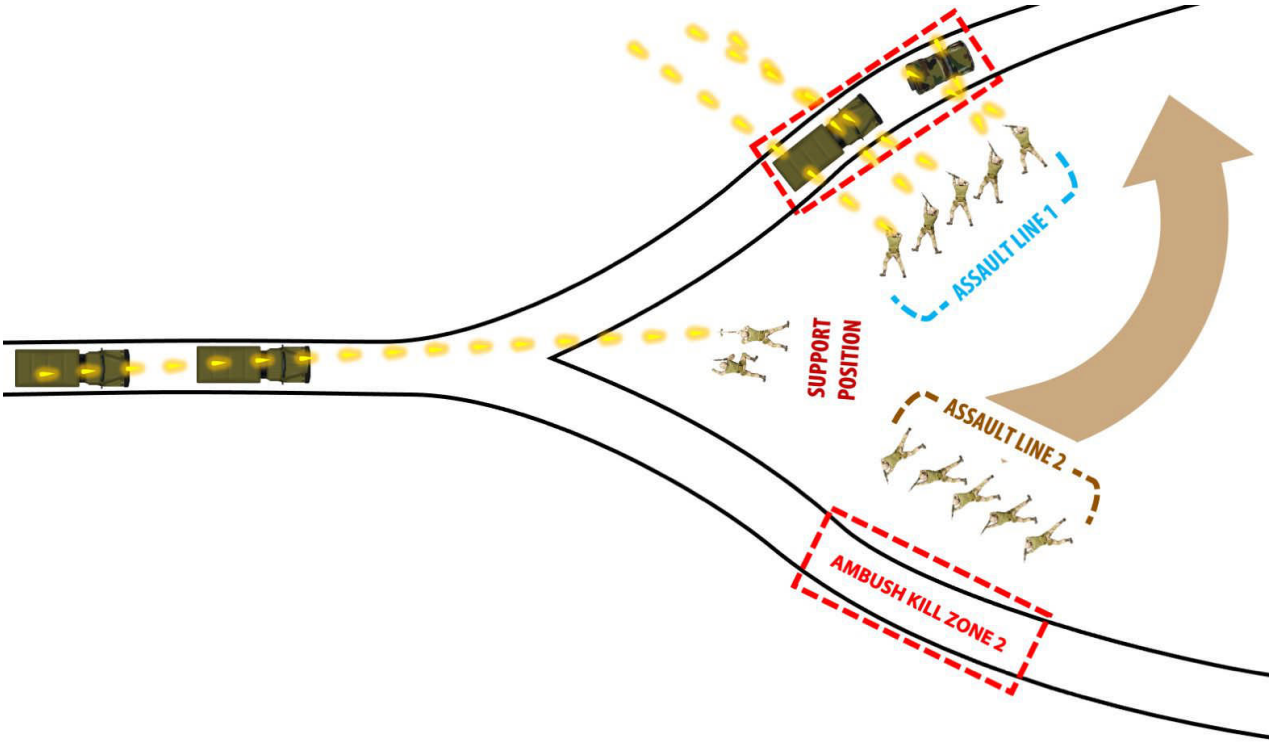
In some situations, you might wait for the enemy to turn left or right at the fork in the road and engage the enemy in one of the two kill zones. In the example, you also rotate your support position machine gun around to achieve enfilade fire attacking the rear of the passing enemy formation. Note that while it is possible to have a support position cover two possible kill zones as in the example, this can be difficult to set up and execute under stress and may increase the risk of accidental friendly fire. If you move the machine gun before opening fire, this might also make noise or attract attention, compromising your ambush before you initiate. In some cases, it might be simpler to position the machine gun further back covering only one kill zone as in the linear ambush.



AMBUSH FORMATIONS: Y-SHAPE AMBUSH

Engaging Multiple Elements and Shifting Assault Lines

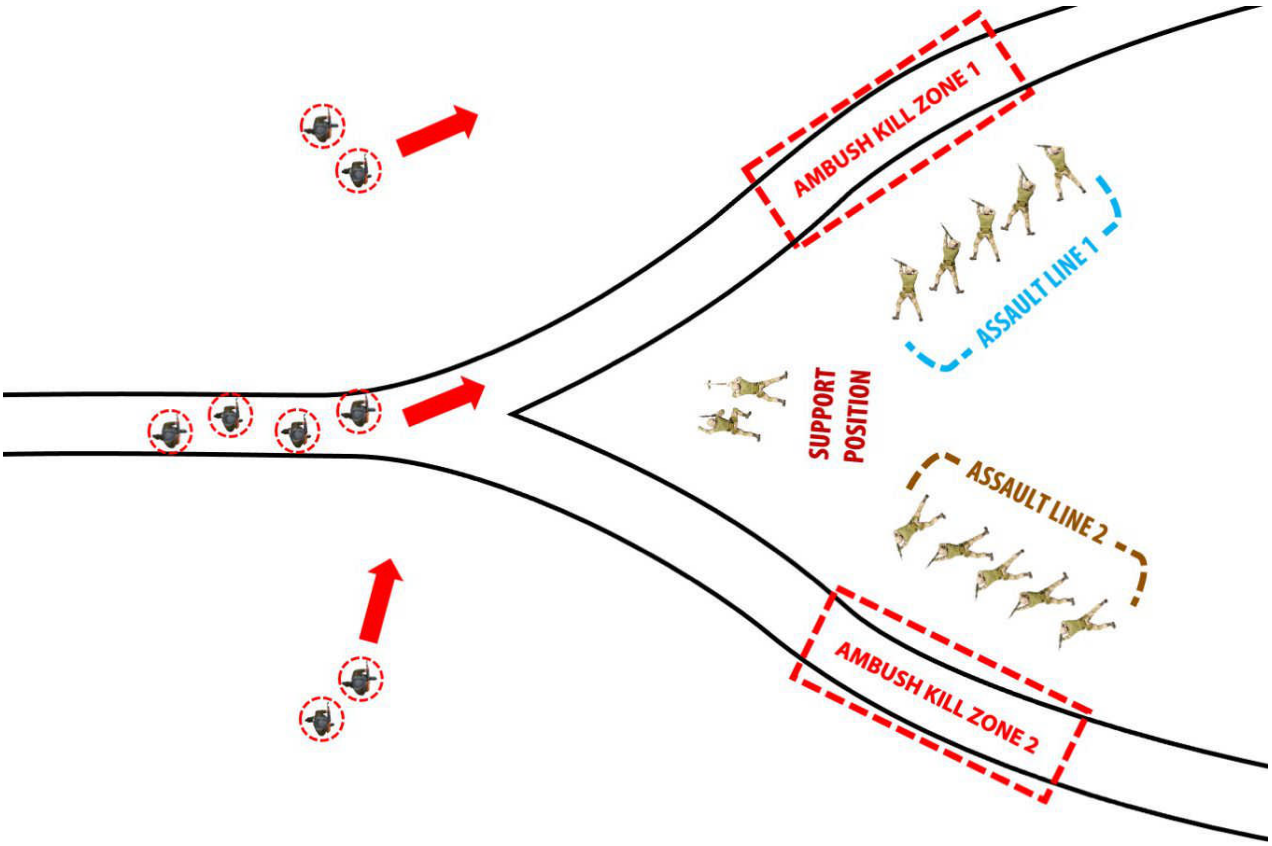
The Y-Shape ambush offers a variety of tactical options depending on the situation, terrain, and composition/positioning of the enemy force. In the example below the enemy is traveling in two separate columns that are spread out. The Y-Shape configuration allows your assault line to engage the lead formation while your support position engages the trail formation with enfilade fire. The example below also demonstrates how you can shift or reposition either of the assault lines. One of the main drawbacks of the Y-Shape ambush formation is that it generally requires more personnel since you have to employ two separate ambush lines. One way around this is to make plans to shift forces to either one of the ambush lines once you confirm which way the enemy turns at the fork. You may want to keep some troops on each assault line and then have a reserve centrally located to augment either line as needed. Or, you can have the assault line not in contact reposition as in the example below. Note that any of these options that involve repositioning of forces have multiple moving parts and may be difficult or dangerous to execute. In some cases, the terrain might allow a single ambush position to engage both kill zones from a central location or high ground etc.



AMBUSH FORMATIONS: Y-SHAPE AMBUSH

Responding to Flankers

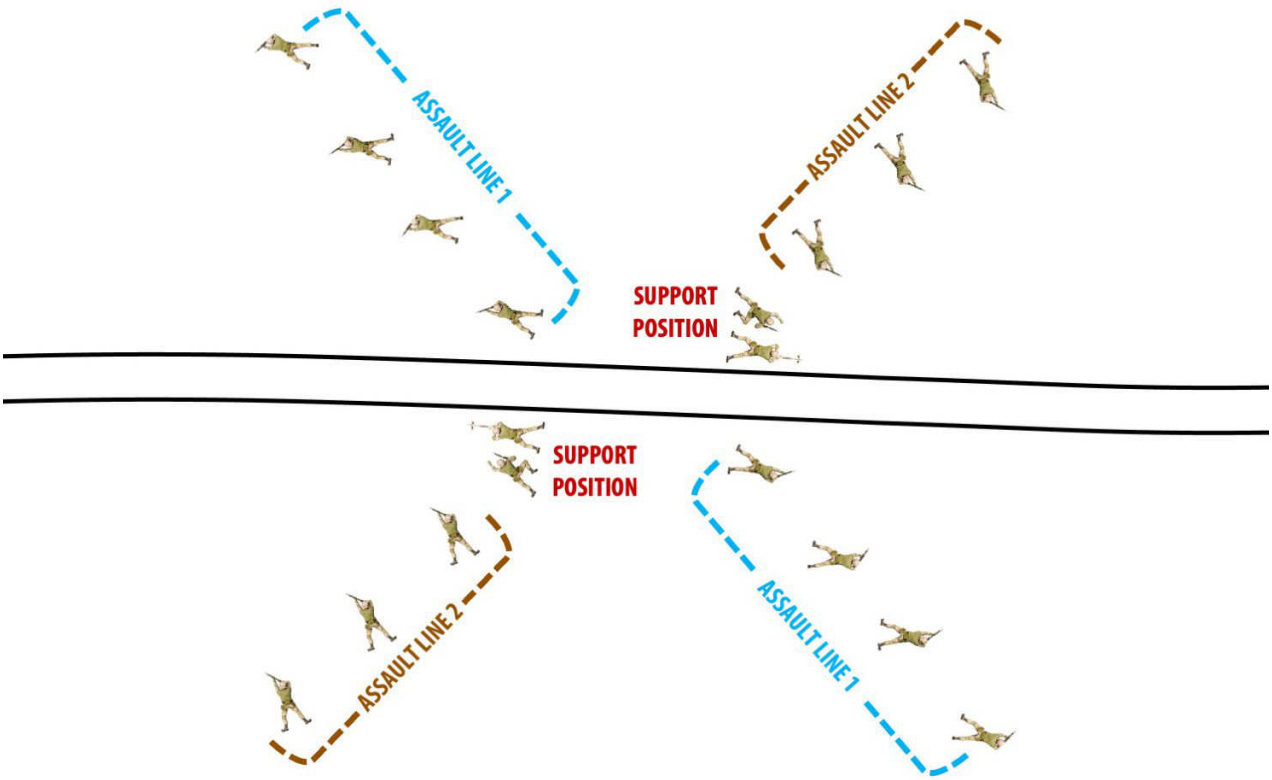
Another advantage of the Y-Shape ambush is that it offers more protection from flankers. As shown in the illustration below, the enemy flankers will have to cross a road before they stumble upon any of your positions. Essentially, the Y formation puts a road between you and the incoming enemy forces, regardless of which direction they approach from. This offers you some additional protection.



AMBUSH FORMATIONS: X-SHAPE AMBUSH

Setting Up Two V-Shape Ambushes

As already mentioned, one of the key drawbacks of the V formation is that it is only effective against enemy coming from one direction. An alternative to this is to essentially employ two V-Shape ambushes back-to-back forming an X. The X-Shape ambush has most of the same advantages as the V-Shape but requires more personnel. Unless enemy are approaching from both directions, one side of the ambush is essentially wasted and not able to participate in the combat without significant repositioning. Finally, the X-Shape ambush concentrates a mass of troops in a single location, making them more vulnerable to artillery or area weapons. For this reason, when employing the X-Shape ambush it might make sense to separate each ambush force to cover more dispersed kill zones. This essentially becomes an area ambush which we will discuss more later on.



AMBUSH FUNDAMENTALS
Security Positions

As we will discuss in this section, the main reason for emplacing security while setting up an ambush is to ensure your force is not compromised before your ambush position is prepared and properly concealed. Security positions also provide early warning of vehicles or formations moving down a target road and can positively identify (PID) the ambush target if your mission calls for striking or capturing a specific individual or unit. Finally, once you have initiated the ambush, your security positions can help isolate the objective and prevent enemies from escaping or prevent additional enemy forces from coming to help.

Some schools will teach students to establish primary and alternate security positions. The primary positions focus on concealment from the road to provide early warning before the target shows up. Once the ambush is initiated the security elements will move to the secondary security positions which are closer to the road and offer better covered fighting positions in order to isolate the objective. Some schools also advocate providing security elements with either a grenade launcher and/or rocket launcher to improve the security positions' ability to destroy or stop vehicles that are moving down the road in either direction.

When emplacing an ambush in the schoolhouse environment you will almost always employ security elements on either side of the ambush line. However, in real-world operations there may be situations when you decide to employ only one security element or not emplace security at all. In some cases, the risk of emplacing security might outweigh the benefits. For example, the farther a security element is from the main force, the more difficult it will be to recover that element in an emergency especially if one of the troopers is wounded. Also, when using certain ambush formations like the V-Shape formation, it only makes sense to emplace rear security since any element forward of the ambush V is likely to be struck by friendly fire. When executing a hasty ambush, you will probably not have time to emplace security.

These are just a few examples of how security requirements can change depending on the situation. Understand your mission and use common sense to develop a security plan that can help you achieve success while minimizing risk. This section offers a few fundamental principles about how security positions work and how best to employ them. Keep in mind that

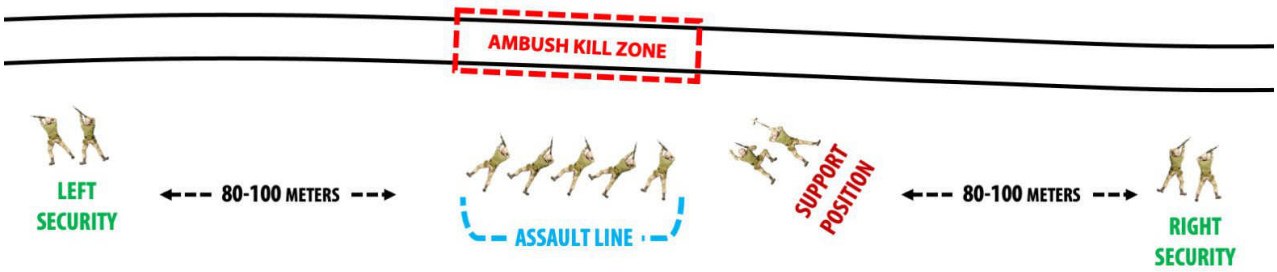
while the examples in the following pages use small teams of troopers for security, there is nothing to stop you from using remote cameras, tripwires, UAVs, or other technological devices to provide security for an ambush. However, every technology or sensor has strengths and weaknesses, and you must know the capabilities of your equipment before attempting to use it in the field. Also remember that in many cases you will have to recover any sensors you emplace after initiating the ambush which can further complicate the tactical plan.

Finally, when emplacing security remember that in most cases, any troops you assign to your security elements will take manpower away from the force that is executing the ambush. Placing multiple security elements at a distance from your main force also increases the chances of friendly fire if elements mis-identify each other as enemy, especially at night or in limited visibility. If the enemy compromises your ambush and you are laying down heavy fire to bound back and break contact while trying to recover your security elements, which might be isolated on the other side of the enemy force, this could be a very dangerous situation. Therefore, think thorough the various scenarios as carefully as possible and emplace security elements in a way that makes sense and minimizes risk in a worst-case scenario.

SECURITY POSITIONS: THE SCHOOL SOLUTION

Positions at Pre-Determined Distances

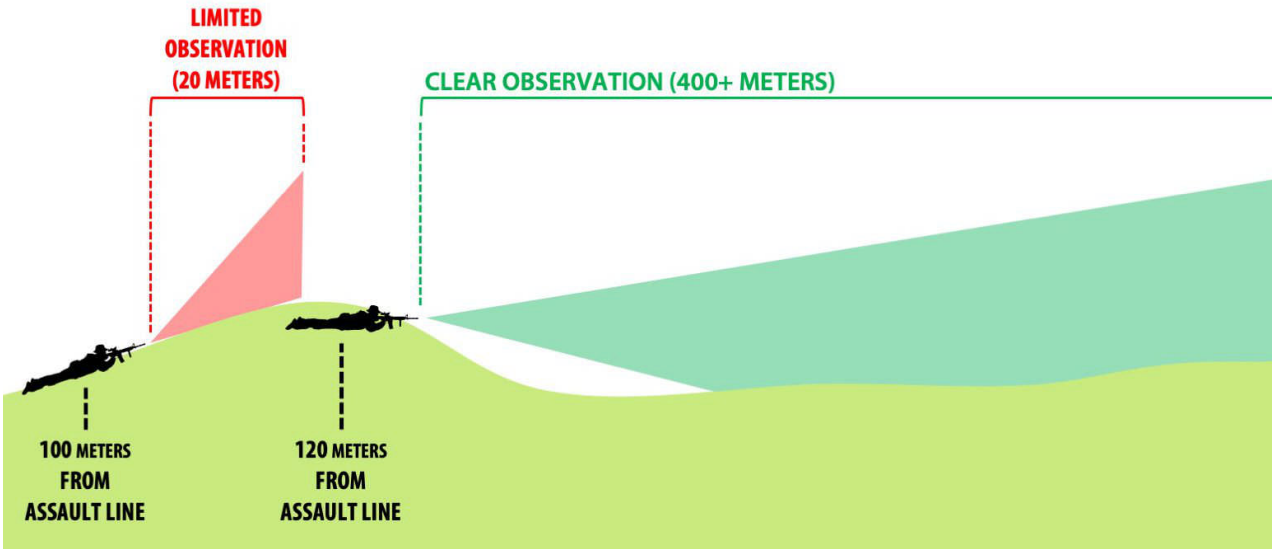
In most schoolhouse ambush training, the primary guidance is emplacing security positions a specific, pre-determined distance from the ambush line. In the example below the positions must be 80-100 meters from the assault line. Precise distances can vary between schoolhouses but the general trend is around 100 meters. While prescriptive guidance like this can help reduce the chances that security positions will be incorrectly or ineffectively emplaced, it is better to understand the reasons behind such tactical decisions and take an "outcomes-based" approach instead of a rigid process-based approach. An outcomes-based approach to training focuses on teaching students *how to think* instead of *what to think*. Therefore, instead of telling students that they must emplace security in a certain way, the outcomes-based approach aims at helping the students understand the reasons behind their decisions and base their actions on achieving desired tactical outcomes. It is possible to emplace security positions between 80-100 meters from the ambush line in a way that is completely inappropriate for the terrain and situation. The following pages go into more detail about how to emplace security most effectively based on desired tactical outcomes.



SECURITY POSITIONS: DESIRED OUTCOMES

Security Positions and Observation Distance

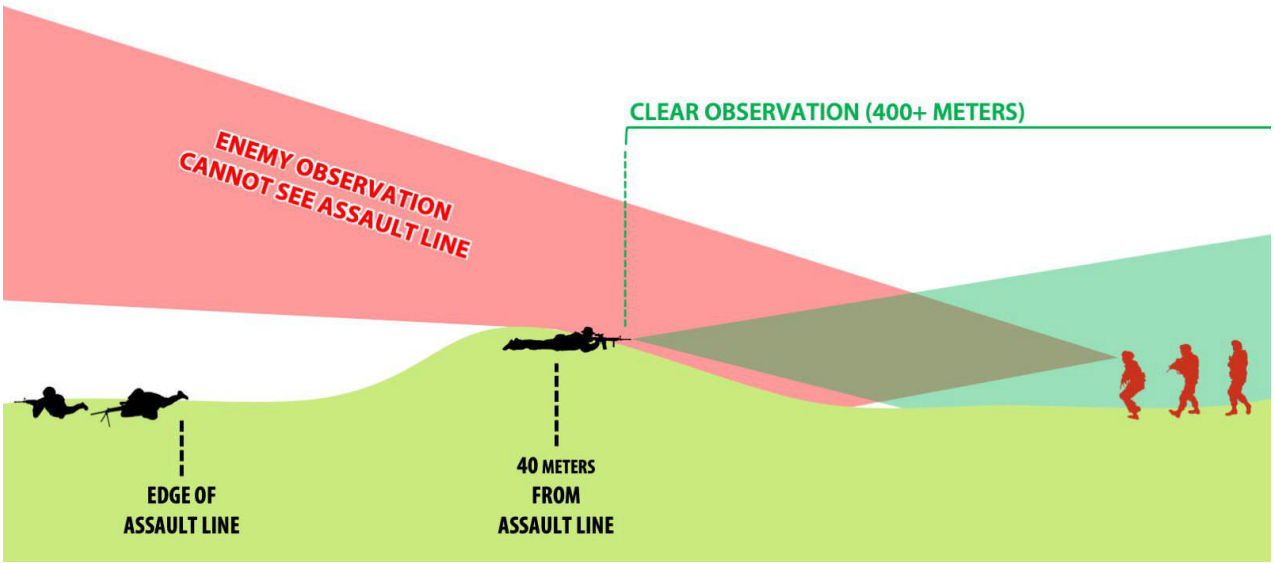
What tactical outcomes are you trying to achieve with your security position? As we will discuss in more detail later on in this section, you are trying to provide early warning for the rest of your element if enemy forces approach along the road. In the example below, the security element marked in red is emplaced 100 meters from the assault line, however, it is only able to see 20 meters to the front because its observation is blocked by terrain. This is the type of mistake can occur when the ambush force emplaces security elements based on rigid prescriptions. As shown in the green example below, by moving the security element just 20 meters further away to a distance of 120 meters, the security element is able to see over the top of the small hill, allowing for unrestricted observation much further down the road. In this second position the security element will be able to spot approaching enemies much earlier, giving the rest of the force more time to respond.



SECURITY POSITIONS: DESIRED OUTCOMES

Screening for the Ambush Force

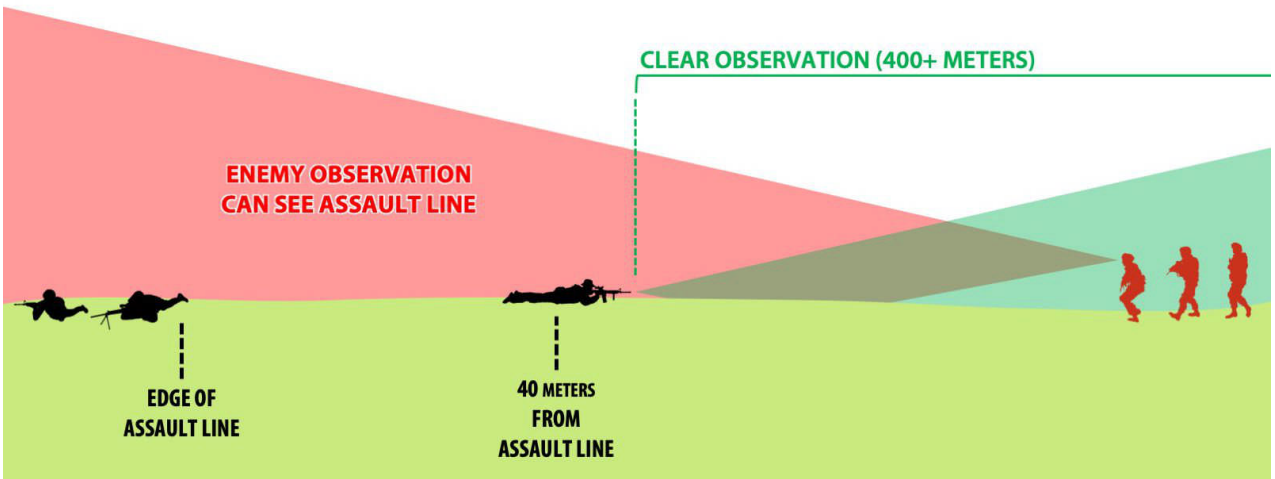
In addition to allowing the security element to provide early warning of approaching enemies, a second reason for placing the security position further out is to help screen the assault line. In simple terms this means that if enemy forces compromise and engage the security position they should not be able to see the assault line as well. In the example below the terrain allows a security element to position on a small hill which provides unlimited observation as well as screening for the assault line. However, this hill is only 40 meters from the assault line, not within the prescribed 80-100 meters from the schoolhouse example. This demonstrates how rules can change based on the situation. Placing the security element further out and giving up the high ground might actually reduce the security element's observation and leave it more isolated and vulnerable. There is always a risk associated with placing security closer to the ambush line since it can offer less room to delay an enemy flanking movement. However, in this case, based on the terrain, placing the security element 40-meters out seems a good option.



SECURITY POSITIONS: DESIRED OUTCOMES

Example of Lack of Screening

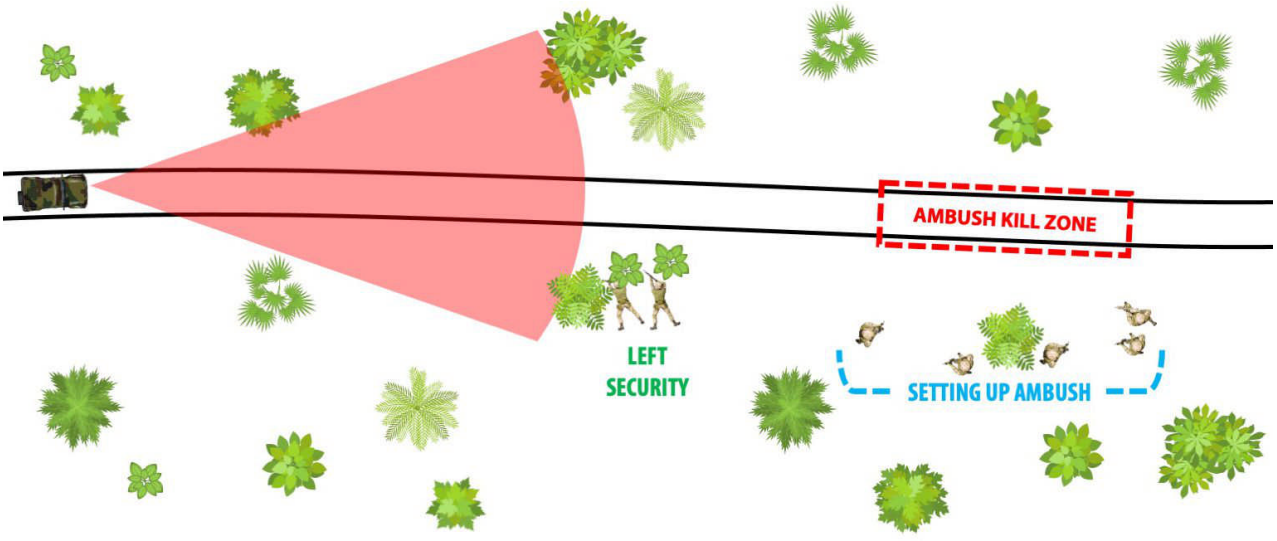
In the previous example, because of the terrain, a security element placed 40 meters from the assault line could provide both early warning and screening. In the example below, the security position still has unlimited observation and can therefore provide effective early warning. However, without the help of terrain, the security position cannot provide effective screening for the ambush force at only 40-meters. As shown below, if the enemy compromises the security element they can also see the assault line at the same time. This means they can engage and pin down the entire force at once. The idea of screening is for the security element to be able to engage/block the enemy to buy time for the main force to pull back or reposition. That would be difficult to accomplish in the example below. Therefore, in this case it might be better to emplace the security position further out, possibly around the 80-100 distance from the schoolhouse. However, in open terrain, 100-meters might not even be far enough if the enemy can still clearly see the assault line from a distance. In this case you might need to push the security position out further or select a more concealed spot for the ambush. These are just a few examples of how to effectively emplace security based on the situation.



SECURITY POSITIONS: OUTCOMES-BASED EXAMPLE

STEP 1: Security Position Spots Approaching Enemy

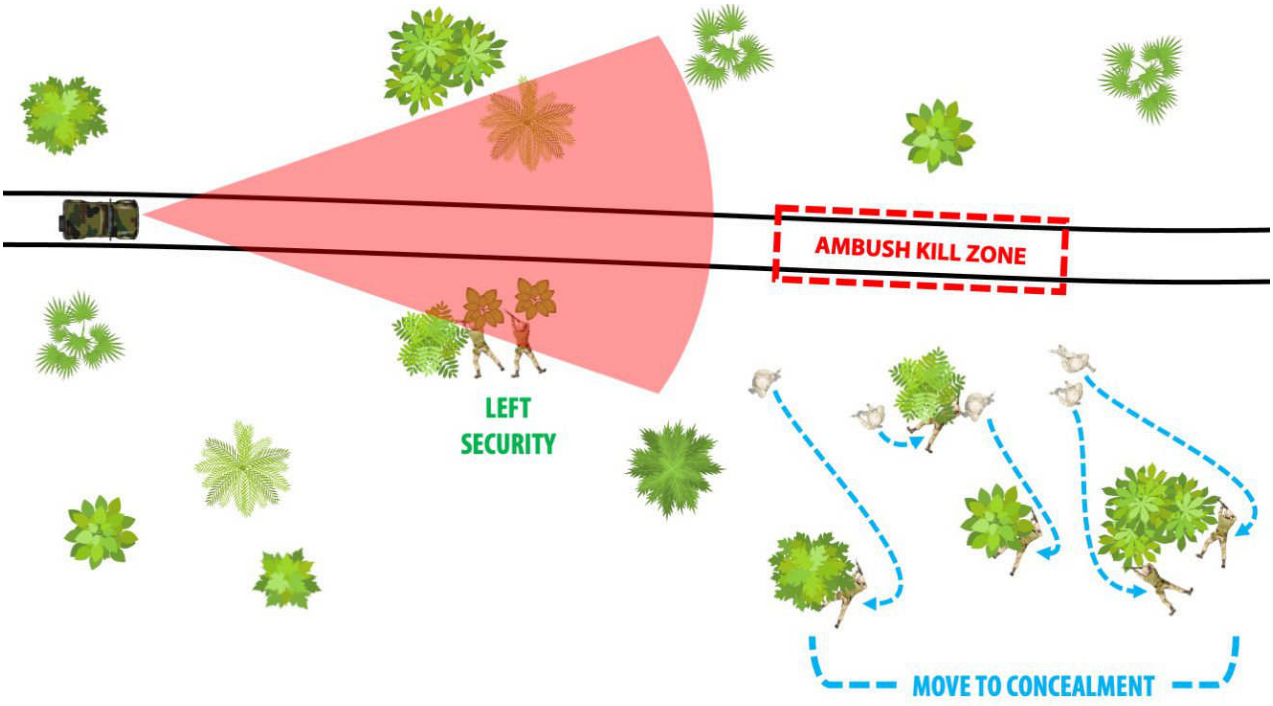
The following is an example of how security positions are supposed to operate in coordination with the rest of the ambush force. A common mistake when employing security elements is failing to think through how things will actually play out if a security element detects a threat. As discussed in the previous pages, you want to emplace your security to provide early warning for the rest of the force, but early warning to do what? For example, maybe you are providing early warning to the main ambush force so they have time to stop setting up the ambush and hide until an enemy vehicle passes. When planning your security positions, you must consider factors like the speed of approaching vehicles and how long it takes the ambush force to hide. If your security position can only provide 10-seconds early warning but it takes the ambush force 20-seconds to move to concealed positions, your security is not accomplishing anything. You must think through all of these options and rehearse beforehand if you want to have the best chance of success during the mission. In the example below, the security position spots an approaching enemy vehicle that is not the mission's ambush target and radios the contact to the main force which is busy setting up the ambush. The ambush force should confirm receipt of the message if possible. There should also be redundance methods of communication in place in case the radio does not work. Alternate methods of communication can also make less noise than a radio of stealth is critical based on the situation and terrain.



SECURITY POSITIONS: OUTCOMES-BASED EXAMPLE

STEP 2: Ambush Force Moves to Concealed Positions

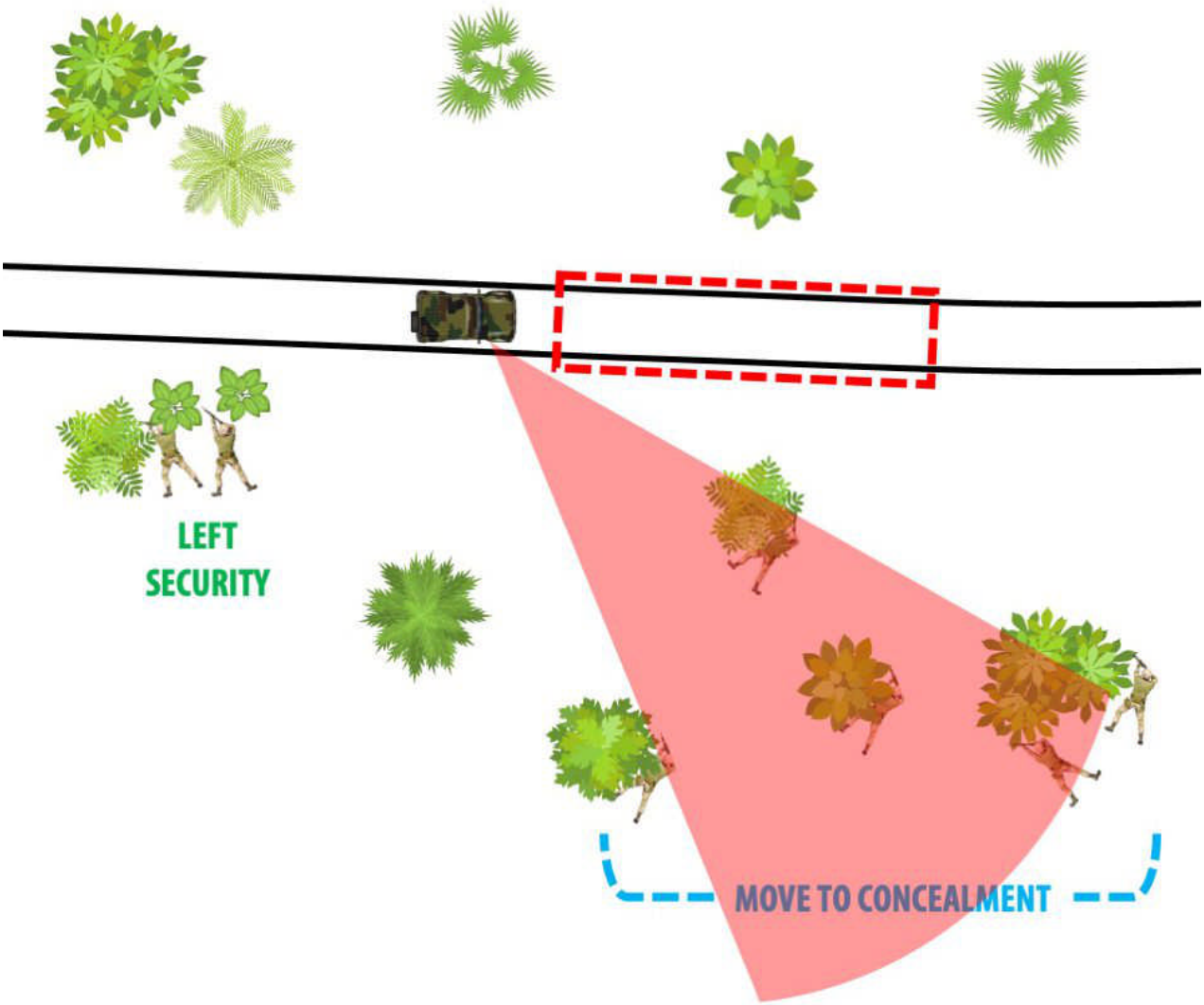
Once the ambush force hears the warning from the security position it stops what it is doing and immediately moves to concealed positions. In the example below, the troopers in the element fall back behind large bushes to hide and wait for the enemy vehicle to pass. However, in some cases the ambush force might be able to remain in place but just get low to the ground. It might be necessary to throw a camouflage net or tarp over a heavy weapon or pull branches into a position to block other weapons or equipment. Whatever action you decide to take to conceal yourself, it must be effective and quick enough to ensure everyone is hidden by the time the enemy is in range to observe you. Before starting to set up the ambush, you should pre-plan your actions if an approaching enemy is spotted, identifying concealed positions, and conducting a quick rehearsal if appropriate.



SECURITY POSITIONS: OUTCOMES-BASED EXAMPLE

STEP 3: Ambush Force Remains Concealed

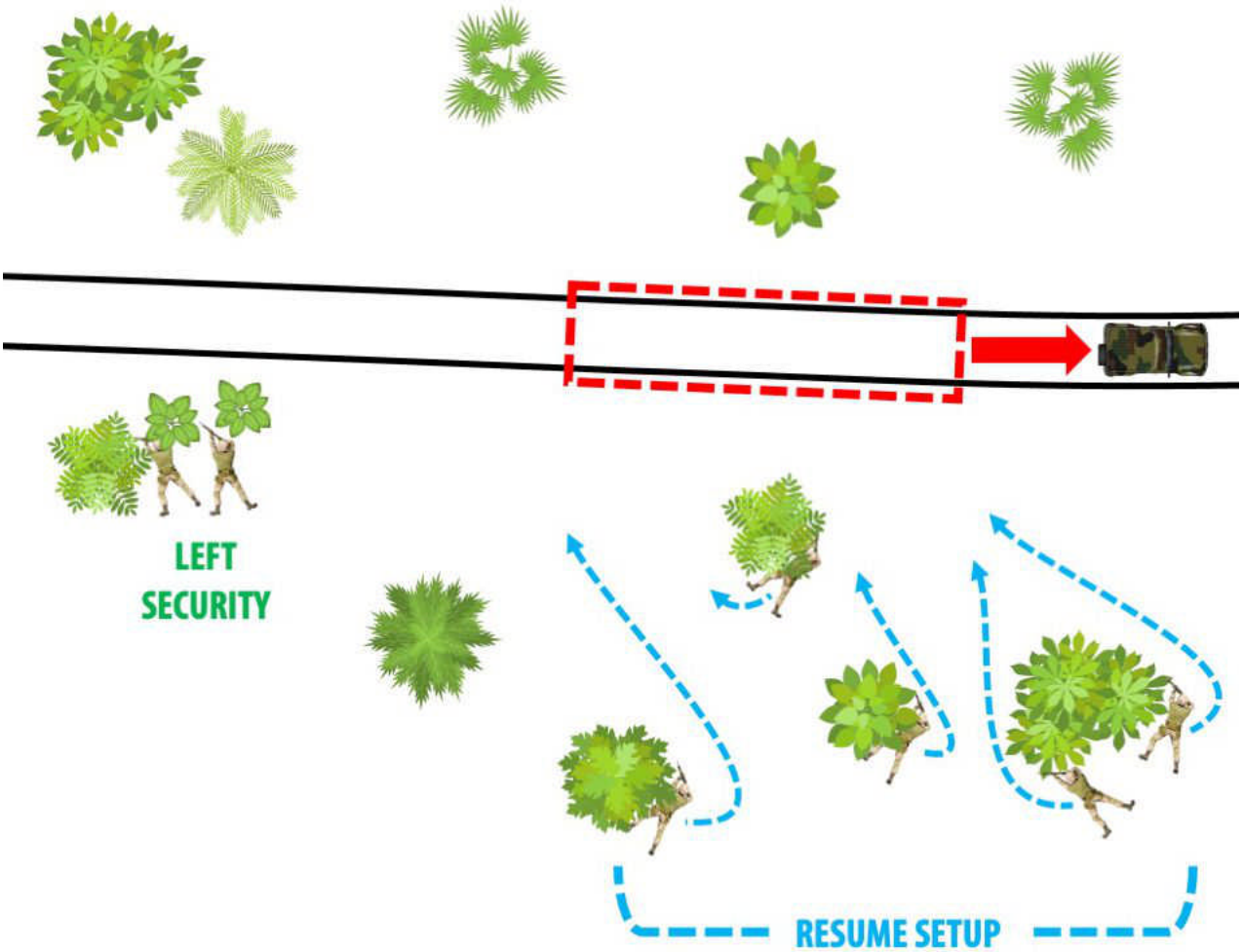
As the enemy passes through the kill zone, the ambush force will remain concealed. If for any reason the enemy detects the ambush force, the ambush force must be prepared to respond and engage the enemy. This means selecting hiding spots that provide good cover as well as concealment. In some cases, the ambush force might decide to remain in place and simply execute the ambush if spotted by the enemy. This can work but might prove problematic if the ambush is not fully set up. Second, if the vehicle passing through the kill zone turns out to be a civilian vehicle it can spot you and might report your position to enemy forces.



SECURITY POSITIONS: OUTCOMES-BASED EXAMPLE

STEP 4: Resume Setup Once the Enemy Passes

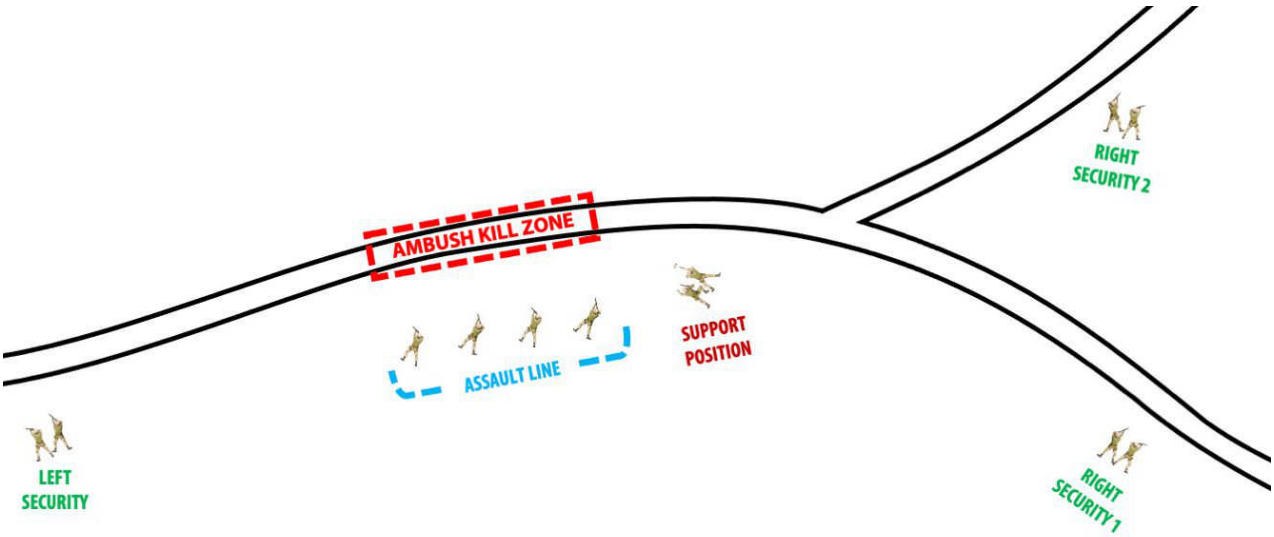
Once the enemy force passes and is at a safe distance, the ambush force should resume setting up the ambush. This is just an example of how the security element might operate in with the rest of the ambush element in the event that an unexpected enemy vehicle appears on the road. Of course, it is also the responsibility of the security element to positively identify the actual ambush target as it approaches. In some cases, you might emplace an ambush to disrupt enemy movement and will want to ambush any enemy forces that pass. In other cases, you will set up an ambush to strike a particular target, possibly a supply convoy or a convoy carrying a specific enemy leader. In these cases, the security element must have as much information as possible and good optics to help them identify the target.



SECURITY POSITIONS: CONTINGENCIES

More Than Two Security Positions

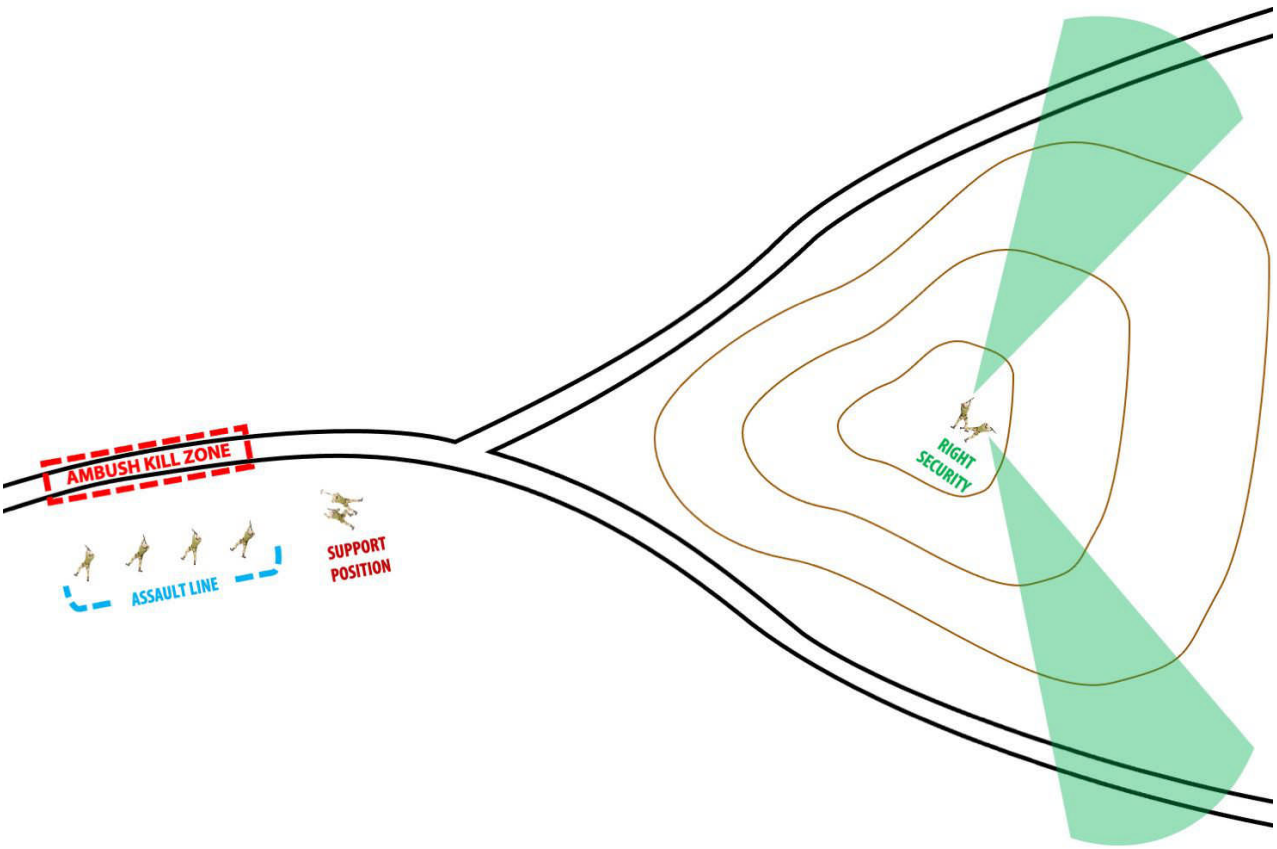
As already discussed, in some situations and ambush configurations such as the V-Shape ambush and Z-Shape ambush, you will employ only one security position to avoid potential friendly fire hazards. However, there might be other situations where you need to employ more than two security positions. In the example below, enemy vehicles could approach from any of three directions, requiring three separate security positions. Every time you add a security position, you are adding a layer of complexity to the tactical situation and drawing manpower from the main ambush force. One way around this is to move the ambush location to terrain that requires only two security positions. However, we will assume that in the example below you need to emplace the ambush in a specific position for some reason and moving it is not an option. In this case you would need to employ an additional security position to cover the third approach to the objective.



SECURITY POSITIONS: CONTINGENCIES

Single Position Covering Multiple Approaches

Taking the same situation as in the previous example where there are more than two approaches to the ambush site, there might be situations where the terrain allows a single security position to observe multiple avenues of approach. In the example below, one position on high ground can look far enough down both approaching roads to provide adequate early warning for the ambush force. If this option is available, it can help conserve manpower for the ambush force. However, also note that security positions emplaced on high ground might be more exposed and more difficult to recover in the event that the ambush force is compromised.



AMBUSH FUNDAMENTALS
Developing the Kill Zone

The centerpiece of any ambush are the forces that are arrayed to engage the enemy in the kill zone. The schoolhouse approach typically breaks these forces down into support elements and assault elements. The support elements generally consist of machine guns and heavy weapons to kill and suppress the enemy once he enters the kill zone. The assault element will generally also take part in the initial ambush, firing rifles and/or light machine guns into the kill zone from different angles. However, once the ambush element ceases fire, the assault element will get up and bound through the objective to search the dead or take prisoners.

However, in a real-world ambush you may or may not choose to assault through the enemy after ambushing him in the kill zone. If you execute a far ambush, your forces will be too far away to assault the enemy in a timely manner. In other cases, you may choose not to assault the objective in order to break contact more quickly and avoid enemy reinforcements. You may choose to employ an assault force but not have them participate in the initial ambush, in order for them to position closer to the enemy and remain concealed until the last minute.

For all of these reasons and others we have chosen not to focus on how to employ support elements or assault elements but rather focus on the effect you want to have on the enemy. Combining the various techniques and formations in this book you can set up many different types of ambushes to achieve specific mission objectives. For example, your ambush might not have an assault element or security positions but rather consist of three machine gun teams set up on high ground to engage enemies passing through a road intersection in a far ambush.

Regardless of how you decide to set up your various elements and the effects you intend for them to achieve on the enemy, there are certain core principles that will apply to all situations. First, you will generally want to assign sectors of fire to the various elements and troopers taking part in the ambush. This will help to focus fire where it is more effective, distribute fire to ensure all areas are covered and avoid accidental friendly fire incidents. This section offers some basic examples of how to assign sectors in an ambush and reviews some specific techniques that leaders can use to ensure troopers know their sectors. We cover these topics and other fire

control topics in more detail in our other infantry books, particularly our Rural Combat book and Machinegun Employment book.

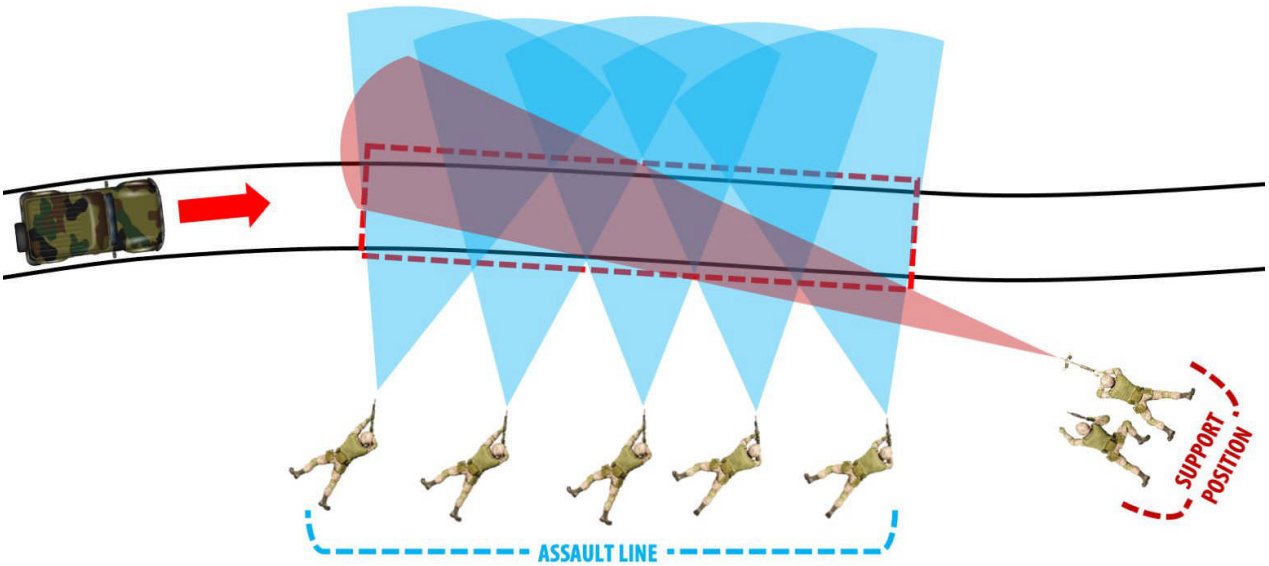
This section also discusses how to incorporate Claymore mines and other explosive devices into an ambush kill zone. The examples offered in the following pages use the M18 Claymore antipersonnel mine for demonstration purposes, but the same principles can apply to a range of mines and/or explosive devices. The art of employing explosives and boobytraps against the enemy is a very broad topic in itself. Detailed instruction in how to prepare, emplace and employ explosives or traps is beyond the scope of this book.

Most infantry units do not have the expertise or equipment to build complex traps and have to stick to employing munitions like the M18 that are easy and safe to use. Therefore, the techniques in this book are designed to be executed by infantry units without special explosives training. However, if your unit includes sappers, engineers or special operations personnel who are experienced with explosives, you can take the same core concepts in this book to greater levels of effectiveness by devising cunning traps and integrating them into your ambush plan.

SECTORS OF FIRE

Sectors on a Flat Kill Zone with One Machine Gun

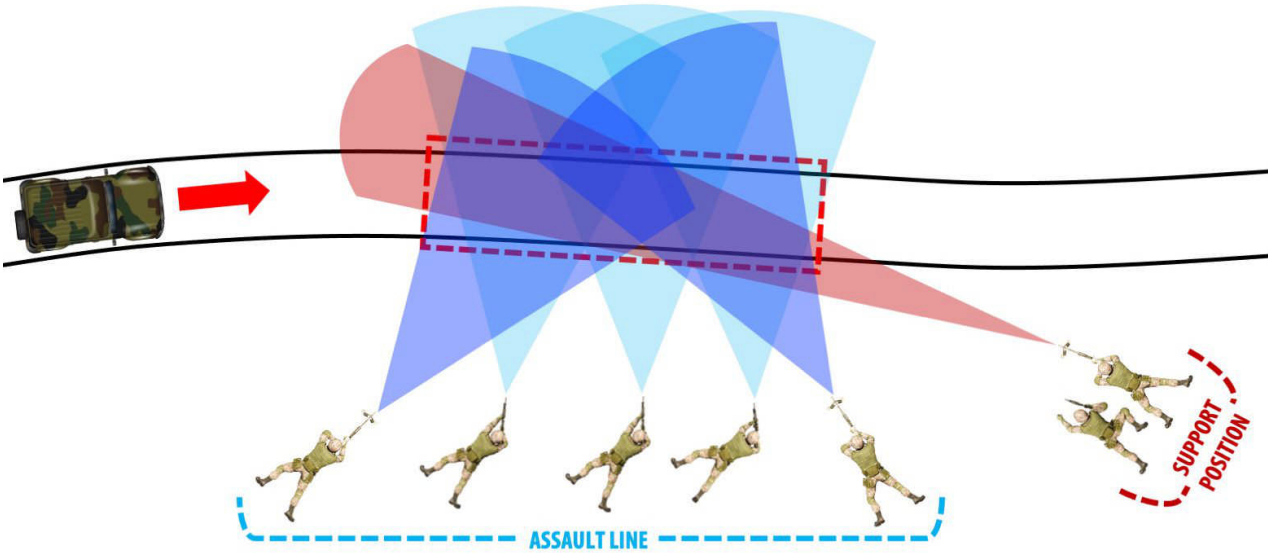
When defining and setting up the ambush kill zone it can be helpful to assign specific sectors to each weapon system if there is enough time to do so. This will ensure that the entire kill zone is covered by fire and that all troopers do not fixate on one target at the neglect of others. The example below offers a fairly standard example of how to assign sectors in a schoolhouse linear ambush. However, the same general principles apply to any formation or situation. If possible, as in the example below, it is best to position your machine gun (marked in dark red) to achieve enfilade fire down the long axis of the entire kill zone as much as possible. If the assault line (marked in blue) is going to fire as part of the initial ambush, one option is to assign equal sectors of fire to each trooper on the assault line. Note graphic below is not to scale and is only intended to represent the general concepts behind assigning sectors of fire.



SECTORS OF FIRE

Sectors on a Flat Kill Zone with Multiple Machine Guns

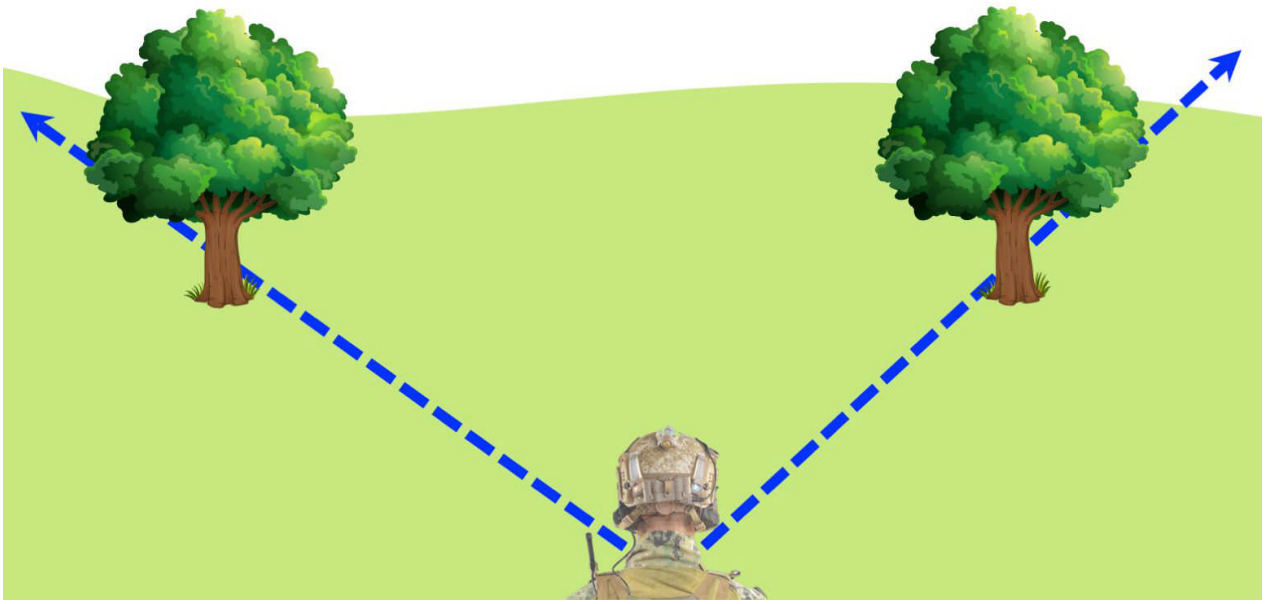
If your ambush force has multiple machine guns (including light machine guns) it might make sense to place your additional machine guns on the extreme left and right of the assault line. This will allow their fire to cover more of the kill zone and catch the enemy in a "tactical-L" between the two guns. Positioning machine guns on the left and right of the assault line means it is also easier for them to fire down the road in either direction, should the ambush element need to break contact in an emergency. Finally, when assigning sectors of fire, you might want to assign larger sectors to your machine guns so they can cover more of the kill zone. Another option is to place additional machine guns in the support position with enfilade fire across the entire kill zone. However, note that bunching your machine guns together makes them more vulnerable to a single grenade or burst of fire.



SECTORS OF FIRE: LEFT AND RIGHT LIMITS

Assigning a Left Limit and Right Limit

In order for sectors of fire to be useful, the individual troopers who are covering those sectors must have a clear idea of the left limit and right limit of their sectors. It is up to small unit leaders to go from position to position assigning left and right limits to each position or trooper. Machine gun positions will be included in this process. When assigning left and right limits, it is important that sectors overlap so no area is left uncovered. it is helpful to use reference points on the ground if they are available. In the example below, the trooper's sector extends between the two large trees. It is also possible to assign sectors using specific compass azimuths. Writing down compass azimuths can be useful as a redundant measure. If a trooper forgets the reference point, he/she can pull out the compass to re-verify the sector. However, when under fire, troopers will probably not have time to reference their compass to determine their sector. If no reference points are available, the squad can plant aiming stakes to mark the left and right limits of each sector.



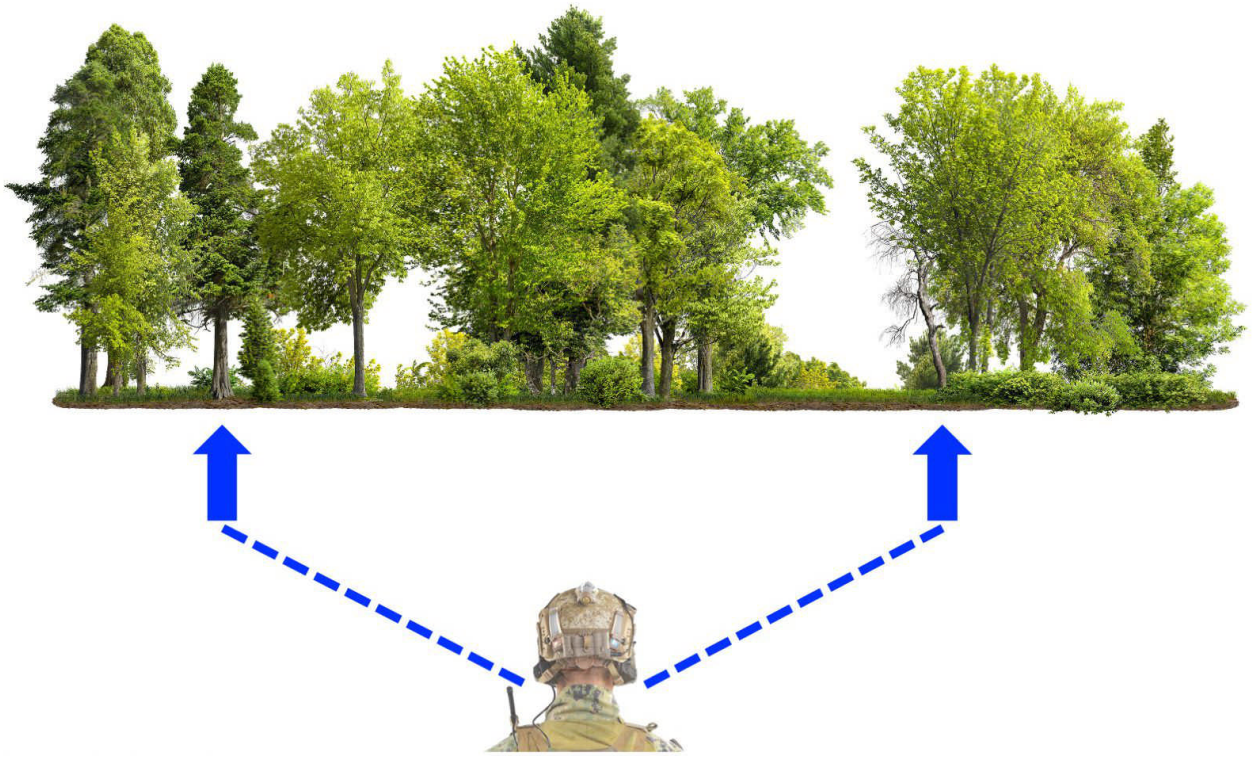
SECTORS OF FIRE: ASSIGNING SECTORS

How to Assign Sectors

It is very unlikely that there will be two large trees in the open in just the right position to mark the limits of a sector. In reality, the terrain is more likely to look like the picture below. It is a common mistake for leaders to move hastily and simply point and say, "your left limit is that dead tree and your right limit is the crooked tree… got it?" without bothering to verify that the trooper has actually identified the left and right limits. This is problematic, especially at night. Given the left and right limits depicted in the image below, what follows is an example of a more reliable way to assign sectors. Every time the leader asks a question, he/she must get a response or confirmation from the trooper…

RIGHT LIMIT: You see the clump of trees right in front of you? Look to the right. Do you see the open area? Ok, just to the right of that open area is a dead tree leaning to the left with some dead branches coming out on the left. Do you see it? Yes? Ok that is your right limit.

LEFT LIMIT: You see the clump of trees right in front of you? Look to the left until you see the first open space. There is one tree with a thin trunk growing up through that open area, do you see it? Ok, to the left of that tree are some bushes on the ground. Just to the left of those bushes is a thin, evergreen tree with a small bush behind it. Do you see it? Yes? Ok that is your left limit.



ENGAGEMENT PRIORITIES

Destroy the Greatest Threat with the Right Weapon

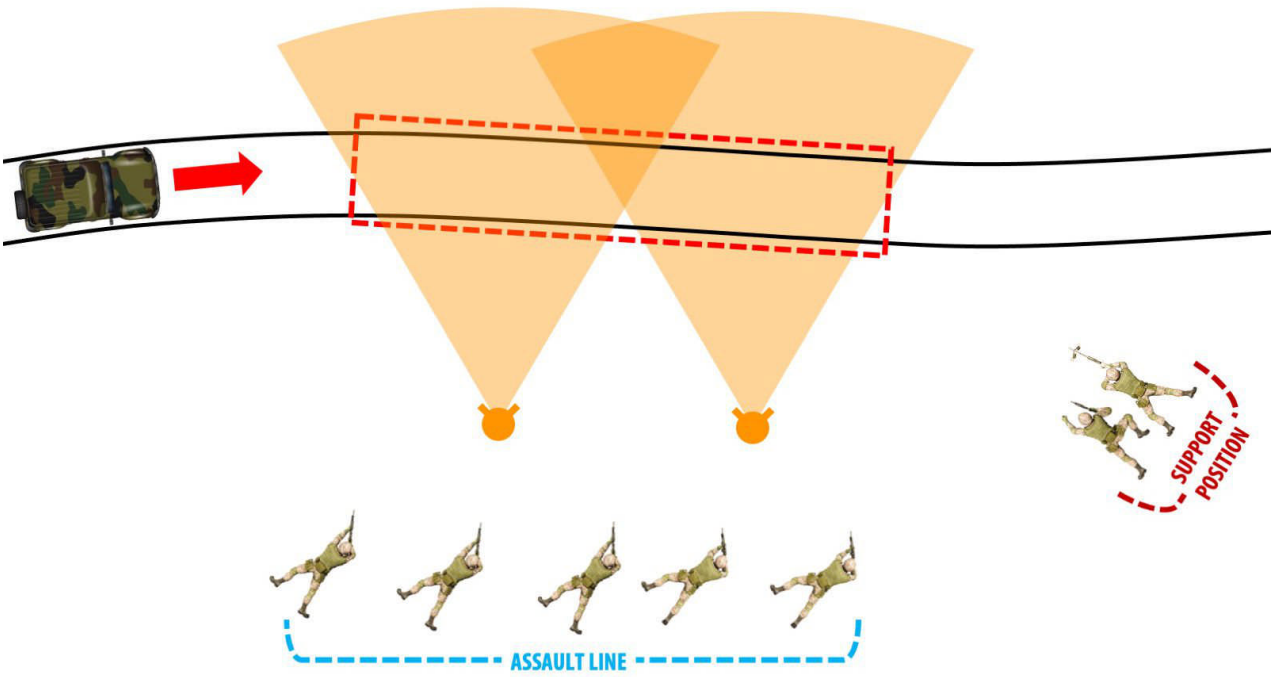
Engagement priorities are another type of fire control measure that help you accomplish two main goals. First, they allow you to mass your firepower to concentrate on destroying the greatest threat first. Destroying a critical threat early in an ambush can tip the scales for the rest of the engagement. When conducting an ambush, targeting enemy leaders, radio operators or key weapon systems first can offer the ambushing force a critical advantage. However, engagement priorities also serve another important goal, ensuring that you employ the best weapon for dealing with a specific target. This means that different weapon systems may have different engagement priorities. For example, even if enemy tanks present the greatest threat, it would not make sense to place enemy tanks as the priority target for a medium machinegun that is not powerful enough to cripple a tank. Rather, it makes more sense to assign crew-served weapons or light vehicles as the priority for medium machine guns while assigning tanks as the priority for anti-tank missiles. It can also help to assign priorities that offer an asymmetric advantage. An example of this is assigning your machine guns to focus on enemy anti-tank or surface-to-air missiles. These weapons present little threat to a machine gun but are very dangerous to tanks or aircraft. As a leader it is critical to clearly communicate these engagement priorities to all subordinate weapon systems. When a higher-priority target appears, the weapon should drop its current target and engage the priority target unless specified otherwise. The diagram below gives some example engagement priorities for different weapon systems that a leader might issue to subordinates in a generalized conventional warfare scenario. The engagement priorities example below is for demonstration purposes only and is probably more detailed than what you would need for most ambush missions.

Javelin ATGM	M2 HMG	M240B MMG	M249 LMG
1- Tanks 2- APCs	1- MANPADs 2- ATGMs 3- APCs 4- MGs 5- RPGs 6- Troops	1- MANPADs 2- ATGMs 3- Light Vehicles 4- MGs 5- RPGs 6- Troops	1- MANPADs 2- ATGMs 3- MGs 4- RPGs 5- Troops

EMPLACING CLAYMORE MINES: SCHOOLHOUSE SOLUTION

Typical Claymore Mine Configuration on a Flat Killzone

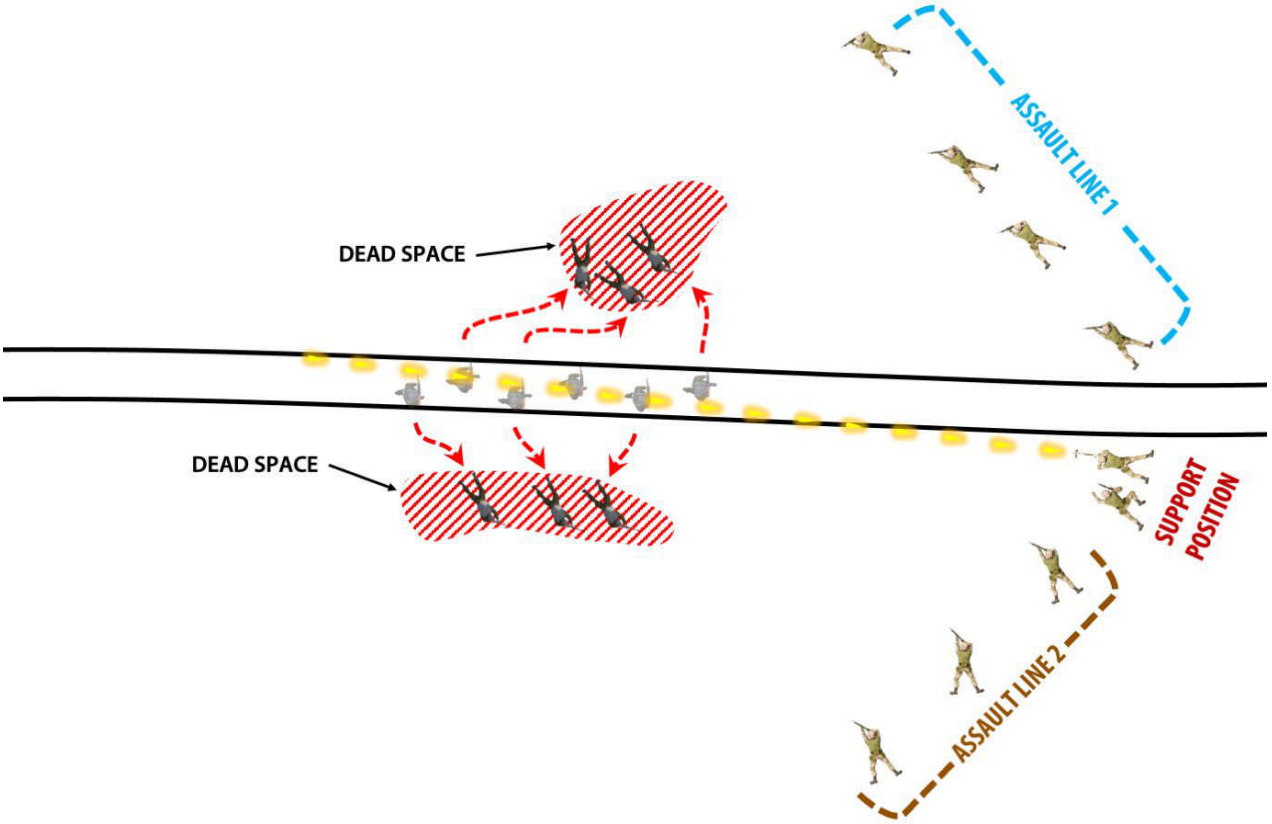
There are many ways to employ Claymore mines as part of an ambush, regardless of what type of ambush or formation you choose to employ. The example below is a fairly standard solution typical of schoolhouse training. It is helpful to employ at least two Claymores so you have a backup in case one does not detonate properly. In general, you should aim the two Claymores to cover the entire kill zone. Each Claymore launches projectiles forward in approximately 60-degree arc to an effective range of 50-meters. Use the Claymore aiming sight to ensure the mine is aimed properly and make sure to test each Claymore using the test gear included with each mine. If you plan to position your assault line close behind the Claymores, it is important to place them in front of large trees, rocks, or some other solid terrain feature to ensure your troops are not hit by the backblast.



EMPLACING CLAYMORE MINES: COVERING DEAD SPACE

STEP 1: Engage with Direct Fire Weapon Systems

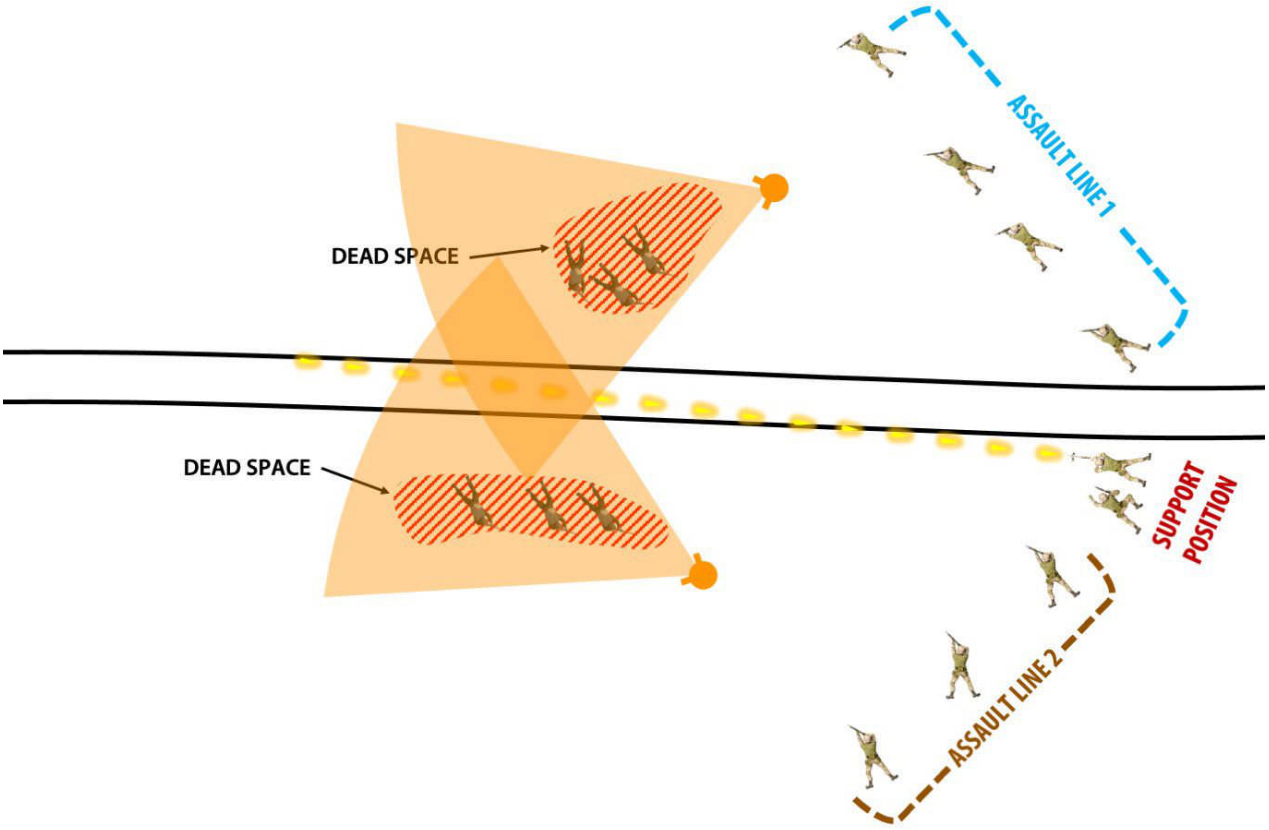
If you emplace your ambush on uneven terrain and there is dead space in your kill zone, you should emplace your Claymores to cover the areas you cannot engage with your direct fire weapons. If you employ your Claymores in a sequential manner, you might even achieve more decisive effects on the enemy than you might have on a flat kill zone. As shown in the example below, the first step is to engage the enemy in the kill zone with your direct fire weapons. This will force the enemy to take cover in the dead space that you cannot engage with direct fire. Note, that the diagram below is not to scale and only depicts the machine gun engaging in order to make the diagram easier to understand.



EMPLACING CLAYMORE MINES: COVERING DEAD SPACE

STEP 2: Engage Dead Space with Claymores

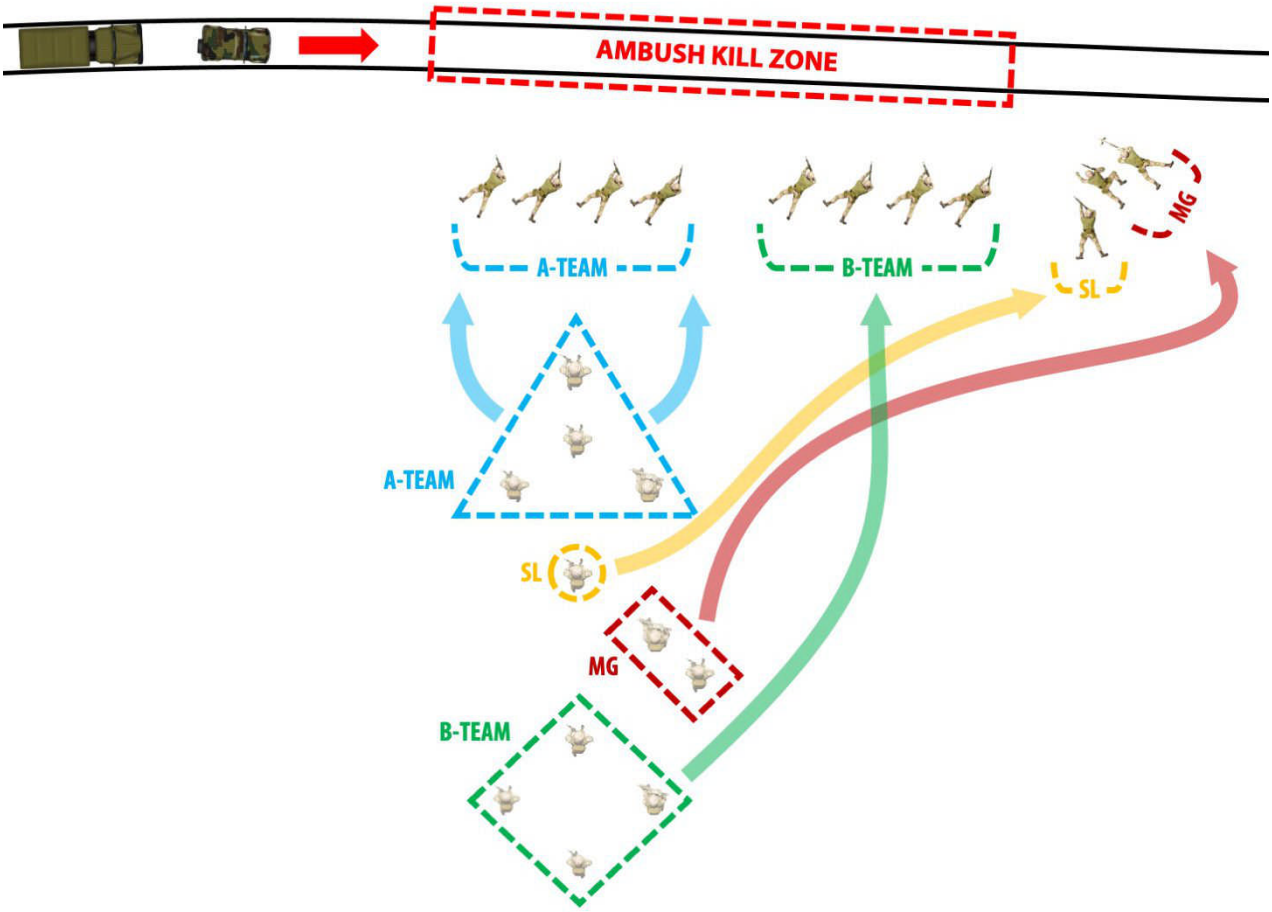
Once the enemy is taking cover in the dead space to avoid your direct fire, you can then detonate your Claymores which you have pre-positioned and concealed to cover the dead space. Because the enemy is bunched up he will be more vulnerable to the fragmentation and blast from the Claymores. This is just one example of how to use Claymores to cover dead space in the kill zone and potentially draw the enemy into a vulnerable position. The example below uses a V-Shape ambush for demonstration purposes but the same concept or technique can apply to any ambush formation.



HASTY AMBUSH

Developing Hasty Ambush Battle Drills

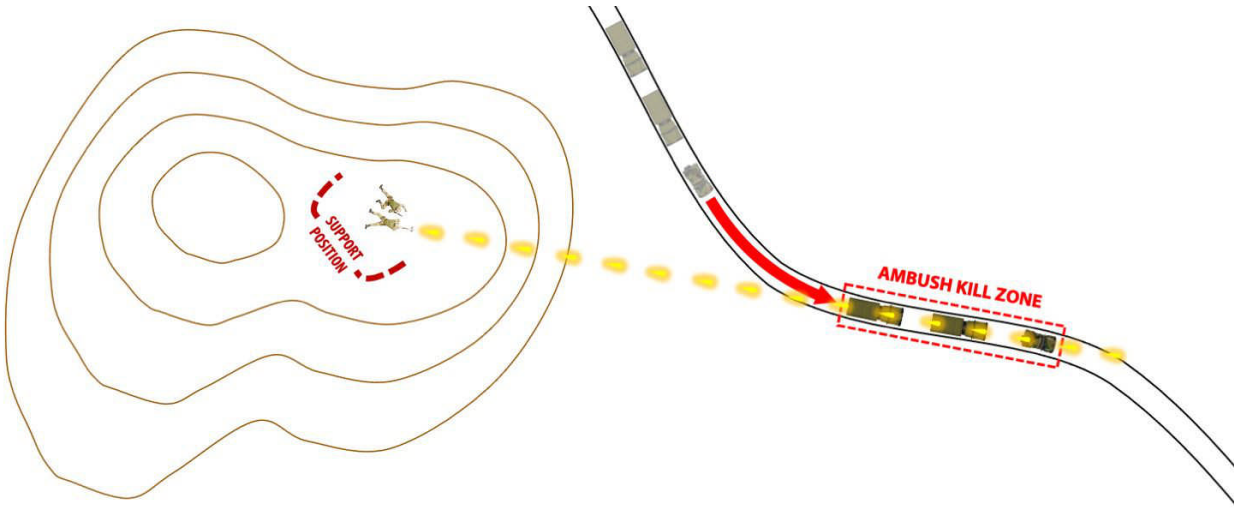
In some situations, you may not have time to set up a deliberate ambush. You might see enemy forces moving towards you down a road or you might receive a time-sensitive tasking to intercept an enemy formation moving along a specific route. If you must emplace and execute an ambush immediately with no warning, it will likely be very difficult if you have not developed and practiced a hasty ambush "battle drill" beforehand. Therefore, you must develop specific standard operating procedures (SOPs) that fit your specific mission requirements and practice executing those SOPs quickly under realistic conditions. The example below shows how a squad moving in a squad column formation might deploy into a linear ambush formation. This is just one example, and you can develop and practice hasty ambush battle drills using whatever formation you choose. It is also important to remember that a hasty ambush can either be a near ambush or a far ambush. We will discuss the far ambush in more detail on the following pages.



FAR AMBUSH

Engaging the Enemy from a Distance

Executing a far ambush means engaging the enemy from a distance where it is difficult for the enemy to respond effectively, offering you a better chance of breaking contact without taking casualties. As discussed earlier, conducting ambushes can be very dangerous if the enemy has come to expect an ambush and is taking action to counter your ambush efforts. Conducting an ambush from farther away greatly reduces the risk to your force and allows you to set up more ambushes more quickly with less planning and preparation time. A far ambush force can also be much smaller, even a two-person team in some cases if your force is highly trained and able to operate in small elements. However, in most cases a far ambush will cause less damage to the enemy force and you will not be able to assault the objective to take prisoners or gather intelligence. The example below shows how a single machine gun team can engage a convoy from high ground in a far ambush. The gun is positioned to achieve enfilade fire down a specific stretch of road as the enemy passes.



COMBAT APPLICATIONS
Tactical Use of Terrain

Tactical use of terrain is one of the most important elements for making an ambush effective. Schoolhouse instruction typically advises choosing a flat "tabletop surface" as the ideal ambush site, since a flat surface gives you unobstructed fields of fire and limits the number of places the enemy can hide. While a flat surface might be a good choice for an ambush kill zone in some cases, there are other terrain configurations that can offer advantages to your force depending on your mission objectives.

In some cases, you might choose to ambush the enemy on hilly terrain, at a bend in the road or as he passes through a bottleneck. In other cases, due to the unpredictable nature of war, you will have to work with whatever terrain is available based on time constraints and mission requirements. Therefore, even if a flat surface is the best option for your specific mission or capabilities, it is important to learn the advantages and disadvantages of various types of terrain so you can make the best possible use of whatever terrain is available.

The following section offers only a few common examples of how terrain can affect the enemy and tactical situation. When using any of the ambush formations or techniques in this book, you might want to take advantage of one or more of the types of terrain discussed here to cause the enemy to react in a certain way. This section discusses terrain that can limit enemy awareness/visibility, restrict the enemy's ability to maneuver or affect the speed of his formation. Remember that each terrain configuration offers advantages and disadvantages based on the situation. In some cases, your goal might be to slow the enemy down to make him easier to target with grenade launchers or rockets. In other cases, your goal might be to make the enemy speed up so he blunders into a trap further down the road. The ideal terrain for any given ambush depends on your mission and the situation.

Conducting Recon of the Ambush Site

As already discussed earlier, the schoolhouse solution for conducting a leader's recon of the ambush site involves moving forward with a small team, identifying all of the various positions for different ambush elements beforehand, and then leaving at least two personnel to maintain overwatch of the site while the leader returns to pick up the rest of the force. There is nothing wrong with this approach and you may want to use a similar method or components of it when conducting a recon of an ambush site in real-world operations. However, while schoolhouse training generally emphasizes the precise positioning of various elements, it can be helpful in real-world operations to instead focus on the terrain to find a spot that puts the enemy at the greatest disadvantage.

When conducting a recon of the ambush site, keep in mind that conducting a leader's recon with a small element first does not always reduce your exposure or signature. If there are hidden enemy observation posts (OPs) or recon elements in the area and they see a small team walking around and scouting the terrain, they will assume it is a leader's recon for a larger force. The enemy can then wait until the larger force arrives and either ambush you or call in artillery fire on your position. Therefore, depending on the situation it can sometimes be better just to bring the entire ambush force when selecting the ambush site. One technique is to set up a hasty ambush along the road right away and then move out with a small element to scout for better positions.

Whether you use a small element or large element for the recon, you should be looking for terrain that offers a tactical advantage. This section offers some examples of ways to use the terrain against the enemy. It is also not always necessary for the leader to precisely identify all of the various positions for various elements. It can be more effective for the leader to communicate his/her *intent* to subordinates, helping them understand how the plan intends to take advantage of the terrain, and then leaving them to determine the precise location of their respective elements using their own judgement. The leader can always step in and adjust these positions later if necessary.

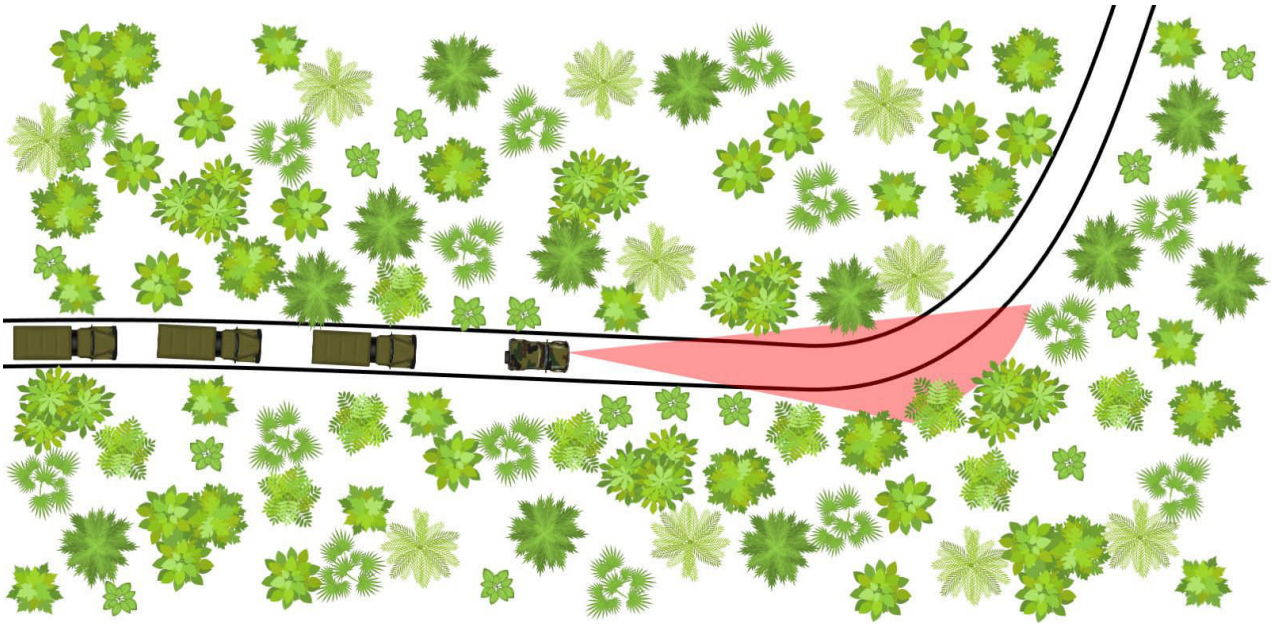
Another technique can be to bring additional key leaders on the initial recon and allow them to determine the best positions for their elements. This saves time when the full unit arrives at the ambush site and better equips subordinate leaders to exercise initiative and contribute to the planning process. As mentioned earlier, if you have digital cameras or recording equipment that can function under the lighting conditions present during your recon, these tools can prove very helpful for passing information about the objective to other personnel who do not have a chance to go on the recon.

These are just a few suggestions for how to recon the ambush site and the exact nature of the recon can vary dramatically depending on the mission and situation. In certain environments, you might want to emplace an OP watching the ambush site for several hours or days prior to executing a mission. There are also many ways to use aerial surveillance assets and electronic sensors to improve your intelligence picture when going through the ambush planning process.

USE OF TERRAIN: LIMITING ENEMY VISIBILITY

Bends in the Road

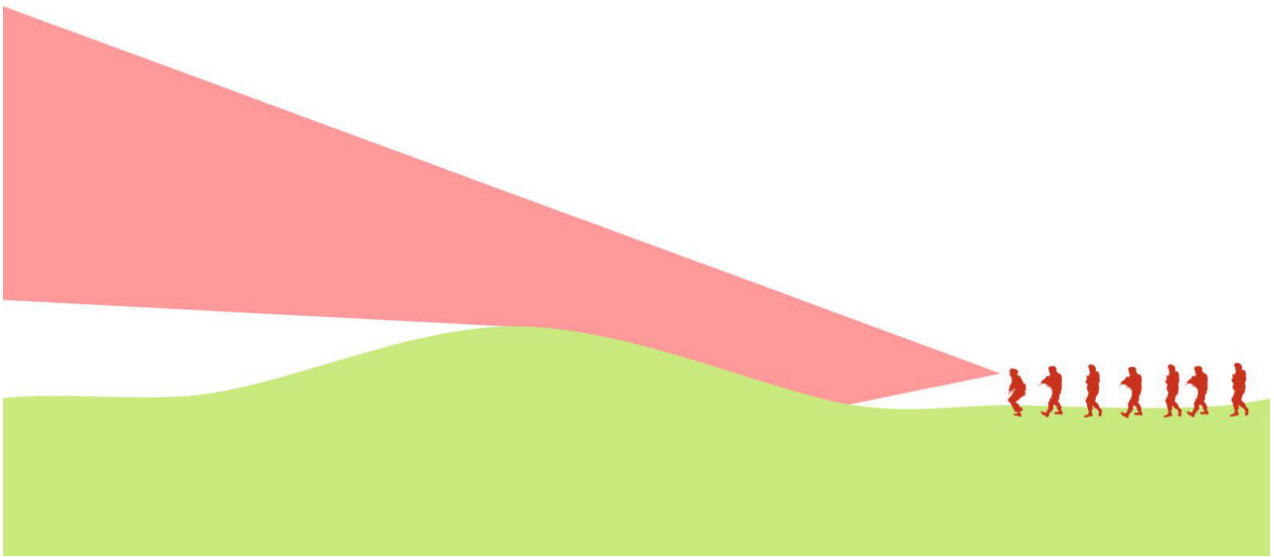
In some situations, you might want to limit the enemy's visibility or set up your ambush so he does not see you until the last minute. One way to do this is to use a bend in the road. This of course only works in restricted terrain where either trees, buildings or hills prevent the enemy from seeing around the bend. Keep in mind, that if you position all or part of your ambush force around a bend in the road, you will also not be able to see/engage the enemy until he makes the turn unless you position security elements to see around the bend. If you position your entire force around the bend, this might also mean that you will only be able to engage part of the enemy element at a time. When working against a larger force, this might provide an advantage, allowing you to strike or attrit the lead enemy elements without being exposed to all of the enemy's firepower. If there are multiple bends in the road, you can use this same concept to isolate and ambush multiple elements in a larger march column. Finally, if your ambush involves drawing the enemy into a trap, it can be useful to place the trap around a corner since that will make it harder for the enemy to spot and react to in time.



USE OF TERRAIN: LIMITING ENEMY VISIBILITY

Hills and Slopes

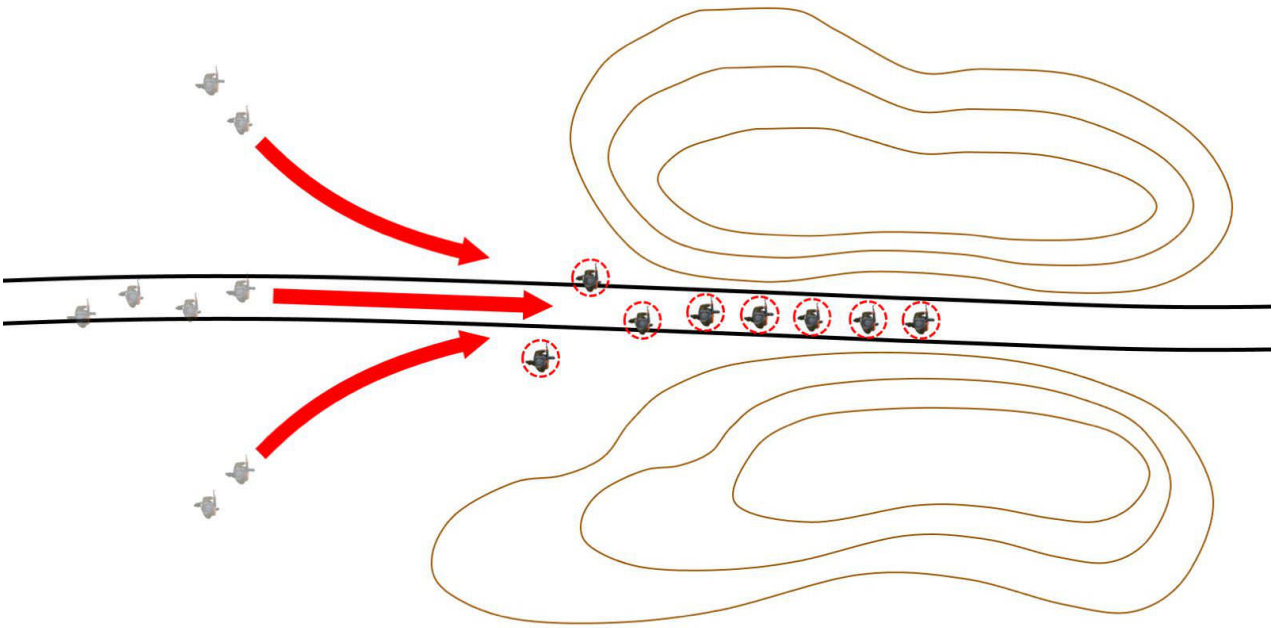
You can use hills or slopes in the exact same way as you use bends in the road to limit enemy visibility. The same advantages and disadvantages apply in both cases. Note that in the picture below, the advancing enemy column cannot see the area behind the small hill. You can therefore position ambush forces or traps behind the hill to surprise the enemy as he passes over the crest. You can also isolate and engage the lead elements of the enemy formation just as you could using the bend in the road. However, note that if the hill is on open terrain, the enemy may have an easier time flanking around to the left or right in response. Finally, in other situations you might want to use the terrain to achieve the opposite effect, placing an ambush position or heavy weapon on the high ground to maximize visibility and engagement range. The same principle can apply to setting up on long, straight stretches of road that offer good fields of fire for your machine guns. Note that while this increases your own engagement range it also increases your exposure and makes it more likely that the enemy might identify your positions earlier on.



USE OF TERRAIN: RESTRICTING ENEMY MANEUVER

Canalizing the Enemy

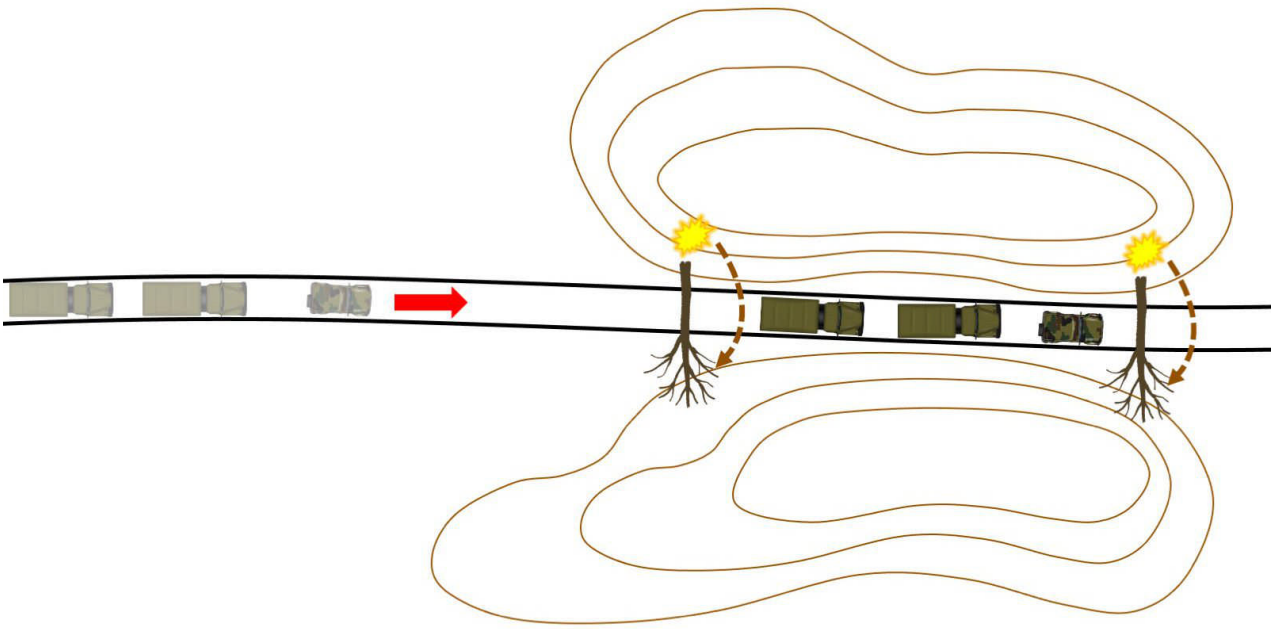
Some terrain might have the effect of canalizing the enemy. Canalization means that the enemy will have to restrict his formation laterally, collapsing into a narrow column in order to move forward. In the example below, the road has steep hills or cliffs on either side that are not easily traversable. When the enemy is canalized, he is more vulnerable in a number of ways. First, canalization makes enfilade fire more effective. If you fire on the enemy straight down the road with a machine gun, he will have a harder time getting out of the line of fire since his mobility is blocked to either side. Canalizing terrain also forces the enemy to bunch up, meaning that a single burst of fire or single detonation of a mine or trap will have a higher chance of hitting multiple enemies. Finally, as shown in the picture below, canalizing terrain can force the enemy to adjust his guard elements, reducing his early warning capability. In this case, the enemy has to pull in his flankers in order to advance through the canalizing terrain.



USE OF TERRAIN: RESTRICTING ENEMY MANEUVER

Employing Obstacles to Block

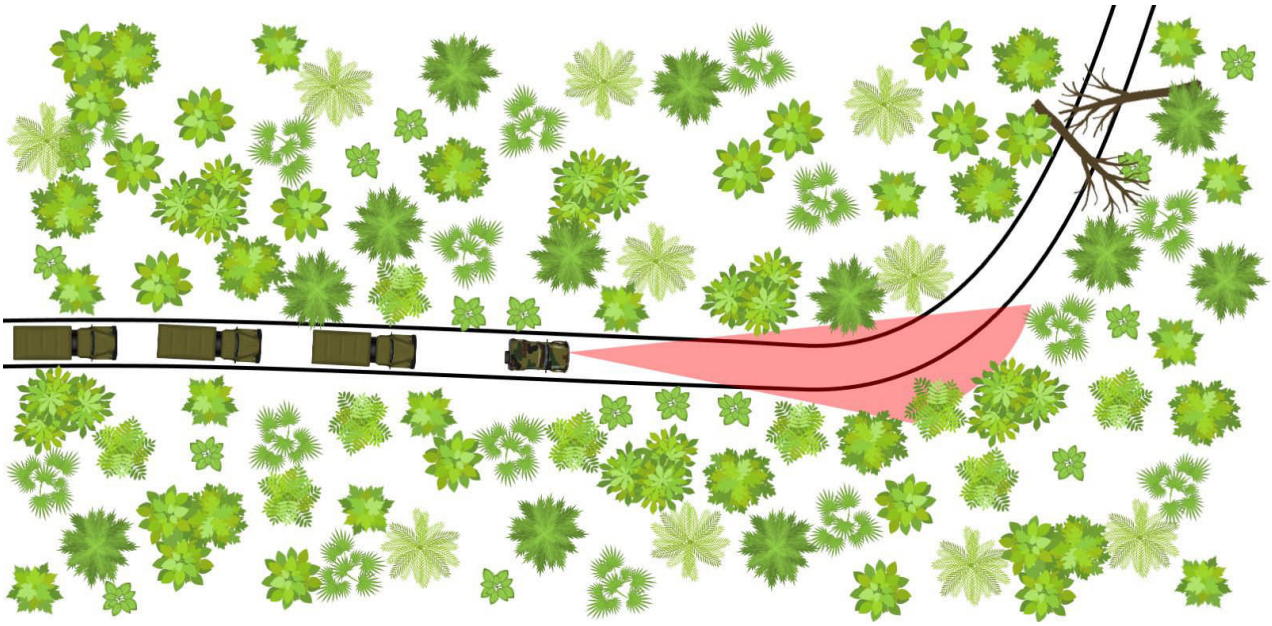
It is possible to use terrain or obstacles to block enemy movement in a given direction. It is important to note however that where the enemy actually stops depends on when they see the obstacle. For example, you might be able to stop the enemy's movement along a road with a large fallen tree. However, if the enemy can see the tree from far away, they will likely not drive right up to it. They might anticipate a trap and may deploy defensively while figuring out how to deal with the obstacle. You can still use this situation to your advantage but it may be more difficult to predict enemy reactions. However, if you want to constrict the enemy's movement more aggressively, you will need to ensure the enemy does not see blocking obstacles until the last minute. There are many ways to do this. In the example below, the ambushing force uses a combination of canalizing terrain and explosive charges to drop large trees on their side of an enemy formation. Other methods might include blowing up a bridge, blowing a large hole in the road, setting fires or driving/rolling vehicles into the road. Note that you can employ such obstacles in any number of ways and combinations. In some cases, you might want to block the enemy on both sides. In some cases, you might want to drop an obstacle in the middle of an enemy formation to divide him. If the target is a large convoy, you might be able to block the enemy by destroying the lead and/or trail vehicles with a grenade launcher or rocket launcher. Each technique will have different effects on the enemy reaction and offer different advantages and disadvantages.



USE OF TERRAIN: RESTRICTING ENEMY MANEUVER

Blocking Obstacles Around a Bend

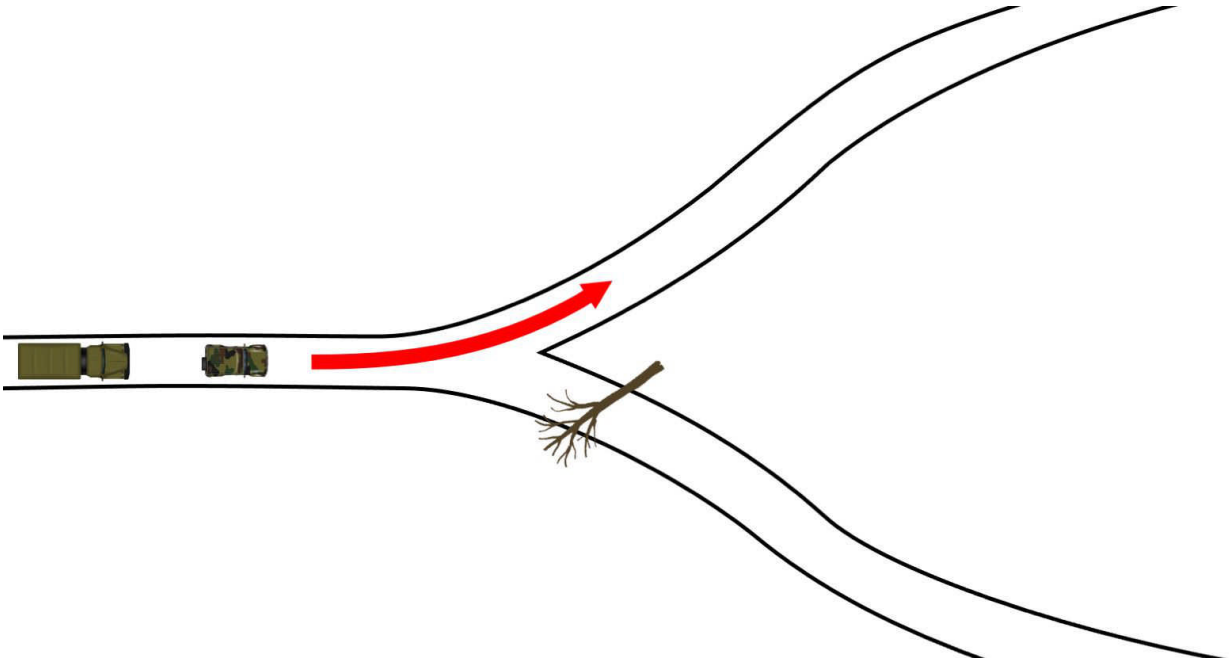
Another way to employ blocking obstacles in a way that is more likely to surprise the enemy is to combine the blocking obstacle with terrain that limits the enemy's forward visibility. The example below uses a bend in the road but it is also possible to use a hill or slope for the same purpose. The idea is that the enemy will not be able to see the obstacle until the last minute. This means you can be more certain about where the enemy will stop, and his formation is likely to be more constricted since he will have less time to react and deploy defensively.



USE OF TERRAIN: RESTRICTING ENEMY MANEUVER

Turning or Redirecting an Enemy Formation

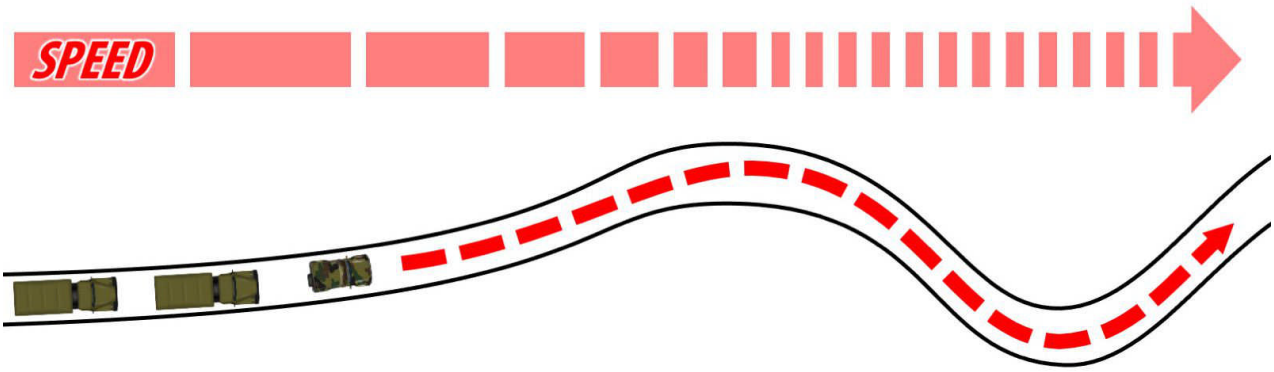
In some cases, you might not want to stop the enemy's movement entirely but rather redirect or turn the enemy in a specific direction. There are many reasons why you might want to do this. For example, perhaps you want to ensure the enemy takes the road that leads him into your ambush. In the example below a large fallen tree blocks the right fork in the road forcing the enemy to take the left fork. Note however that an intelligent enemy will likely anticipate a trap whenever his movement is redirected in this way. In some cases, the enemy might decide to stop and remove or reduce the obstacle rather than taking the easy path, even though this might slow the formation's movement. Therefore, as the ambush force it is important to have plans in place for this contingency.



USE OF TERRAIN: SLOWING OR FIXING THE ENEMY

Bends or Turns to Slow a Vehicle Formation

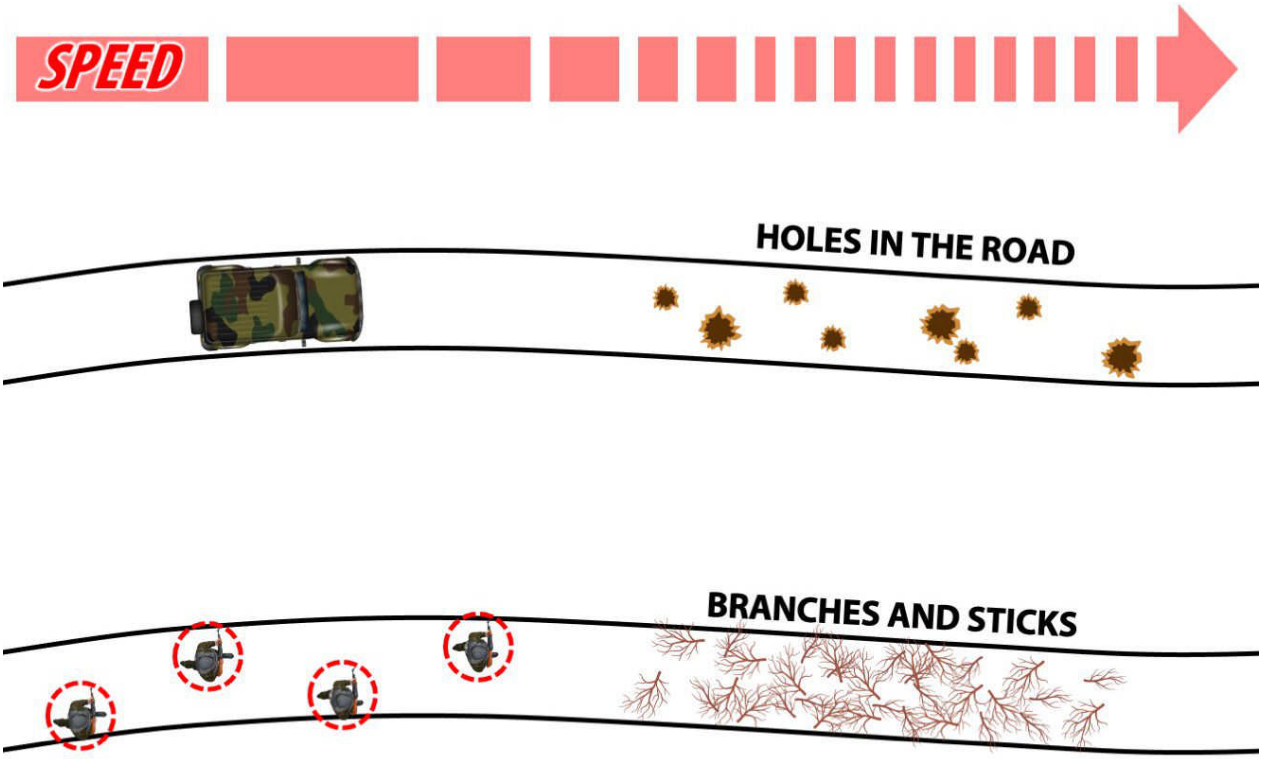
In some cases, you will simply want to slow the enemy down so he is easier to ambush. Enemy vehicles will have to slow down in order to make turns. The tighter the turn, the more the vehicle will have to slow down. You can use this effect in various ways when emplacing your ambush. A common counter ambush technique is to quickly drive through the ambush and out of the kill zone. This will be more difficult if the column is moving more slowly. Some weapons, like grenade launchers, are difficult to employ against fast-moving vehicles. If you are employing such weapons as part of your ambush, using the terrain to slow the enemy down might be helpful.



USE OF TERRAIN: SLOWING OR FIXING THE ENEMY

Obstacles or Obstructions in the Road

In addition to turns and bends, obstacles or obstructions in the road itself can help slow down an enemy force. Large potholes, puddles of water or mud can slow down a vehicle formation. A tangle of fallen branches or deep mud can slow down a dismounted element in the same way. In addition to slowing the enemy down, obstacles in the road will also reduce the enemy's situational awareness of his surroundings. For example, if a driver is focused on avoiding potholes in the road he will not be looking to his left and right for your ambush force. The same goes for dismounted enemies trying to maintain their footing on uneven terrain. This reduced enemy situational awareness can offer your ambush force an advantage. However, note that an intelligent enemy might be extra vigilant when encountering obstacles in the road, expecting a possible trap.



COMBAT APPLICATIONS
Area Ambush Tactics

An area ambush essentially consists of several smaller ambushes spread across a larger area or sector. While it is possible to execute a point ambush with an element larger than a squad, it can be difficult or dangerous to mass multiple squads into a tight space and coordinate the fire of so many weapon systems effectively. Therefore, planning and executing ambushes at the platoon level and above generally involves coordinating multiple squad-level point ambushes into a larger area ambush.

As we will discuss in more detail in this section, area ambushes can be set up in a variety of ways to achieve different objectives. In some cases, you might want to set up multiple ambushes along a single enemy avenue of approach in order to simultaneously strike at multiple elements or echelons of a large enemy formation. In other cases, you might have no choice but to set up an area ambush covering multiple avenues of approach because you simply do not know which road the enemy will choose to use.

Area ambushes may also be integrated into a larger operation such as an infantry defense-in-sector. In other cases, area ambushes might be set up to cut off or disrupt an enemy's line of retreat following a deliberate attack. An area ambush might employ only two ambush positions, or it might consist of numerous ambush positions spread across a wide area. As we will discuss, all of the ambush positions in an area ambush do not have to be alike or designed to achieve the same effect on the enemy. You can mix and match various ambush types and formations in any combinations you choose.

The more complex your area ambush plan, the more coordination and control measures you will need to mitigate risk and increase effectiveness. Whenever you are employing multiple independent elements in a large sector, you must always have clear fire control measures in place to ensure stray fire from one element does not accidentally strike another element. If you are initiating multiple ambushes throughout a sector, the enemy might react and change his plan after you initiate the first ambush and you therefore must be ready to reposition your other forces and adjust your own plans to keep pace with the enemy.

When employing multiple ambushes as part of an area ambush, some degree of centralized command and control (C2) will be necessary, even if this involves defining control measures and boundaries beforehand to give individual units maximum autonomy and flexibility to act on their own initiative. There are a number of ways to set up your command and control structure for an area ambush and detailed discussion of such command and control techniques is beyond the scope of this book.

However, at the most basic level there are two command and control options available. First, you can have once centralized HQ to communicate with the various ambush positions and coordinate their actions. This HQ might be in a centralized location, co-located with one of the ambush sites or further back from the action in a safer location. Each HQ location offers different advantages and disadvantages. Regardless of where you position your HQ, the role of the HQ is to remain in contact with the various ambush positions, coordinate their efforts and keep them informed of developments on the battlefield. In some cases, it can be useful to establish prearranged codewords for various events to keep communications brief and secure.

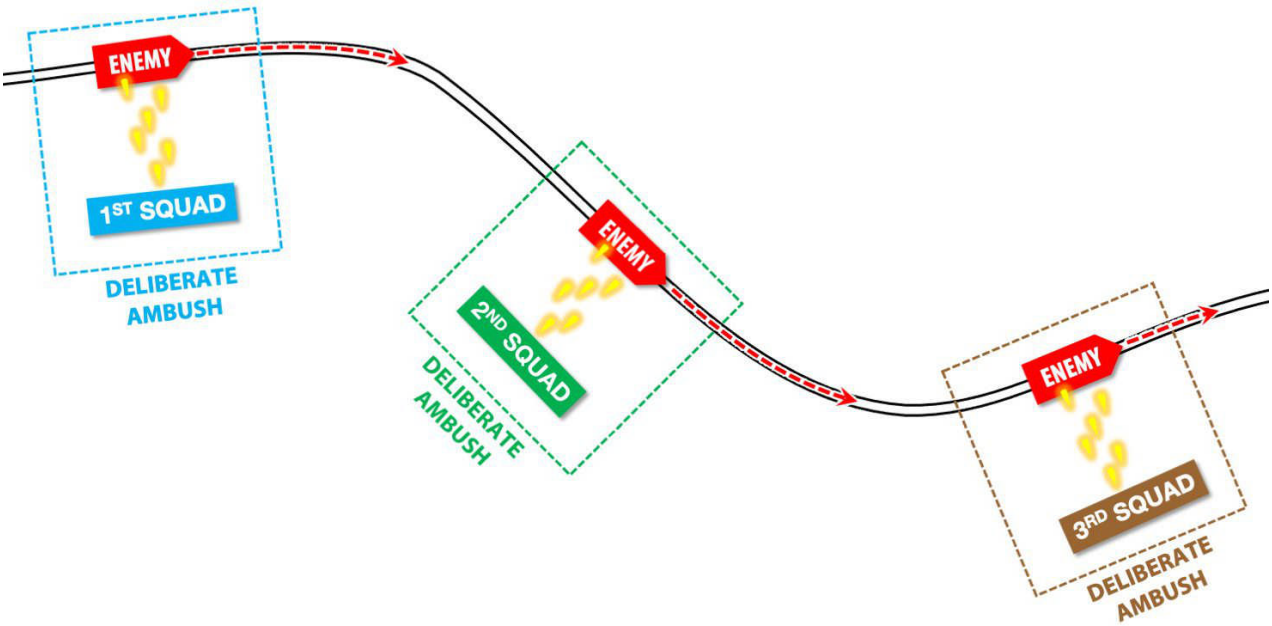
Having one centralized C2 hub, can simplify things for the subordinate elements since they all know who to contact when reporting or requesting information. However, a single command element might have difficulty processing multiple requests and communicating with multiple elements simultaneously, slowing the operational pace and the reaction speed of individual units. In short, if all communications have to pass through the HQ, this can form a bottleneck if the battlefield situation grows chaotic or out of control.

A faster method is to encourage more lateral communication between the various ambush elements. You can still have a centralized HQ, or the unit leaders can embed themselves within the ambush elements themselves. Lateral communication is faster and allows multiple elements to collaborate and solve problems without needing to report up to a higher command level. However, less experienced units might have difficulties with this type of “flat” command structure and it is therefore critical to practice lateral communication and decentralized execution in training before attempting to employ such approaches in combat.

AREA AMBUSH: SIMULTANEOUS ON SINGLE COLUMN

Coordinating to Fix All Echelons of an Enemy Column

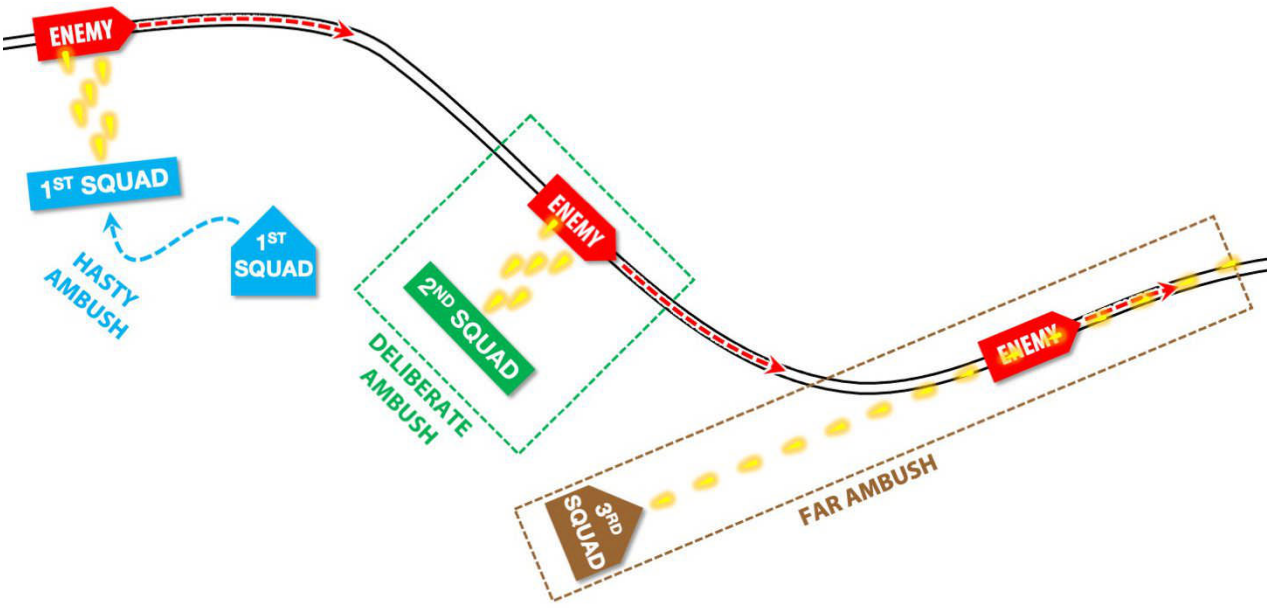
One reason for conducting an area ambush is to simultaneously engage multiple elements or echelons of a single enemy march column. One of the problems with conducting a point ambush on an individual enemy element that is part of a larger force is that the other enemy elements not in your kill zone are free to maneuver against you. By executing an area ambush, you can simultaneously engage and fix all of the elements in an enemy march column, making it much more difficult for the enemy to respond. In the example below, your platoon sets up three, deliberate squad-sized linear ambushes along the enemy's avenue of approach. The problem with the example below is ensuring that all three of the deliberate ambushes are positioned so they can strike the enemy column at approximately the same time. If one ambush initiates before the others, the enemy will be tipped off and might be able to stop short of the other kill zones to counterattack the ambush force. Therefore, if you plan to execute multiple deliberate ambushes on a single enemy column, you must know the interval between the various enemy elements and carefully position your ambushes accordingly. While the example below uses only linear ambushes, you can execute an area ambush using any combination of ambush formations. Also, when setting up multiple ambushes it is critical to identify the surface danger zones of each weapon system on your tactical map to ensure stray fire from one ambush does not accidentally strike friendly forces in another ambush position.



AREA AMBUSH: FLEXIBLE ON SINGLE COLUMN

Flexible Approaches to Simultaneous Ambush

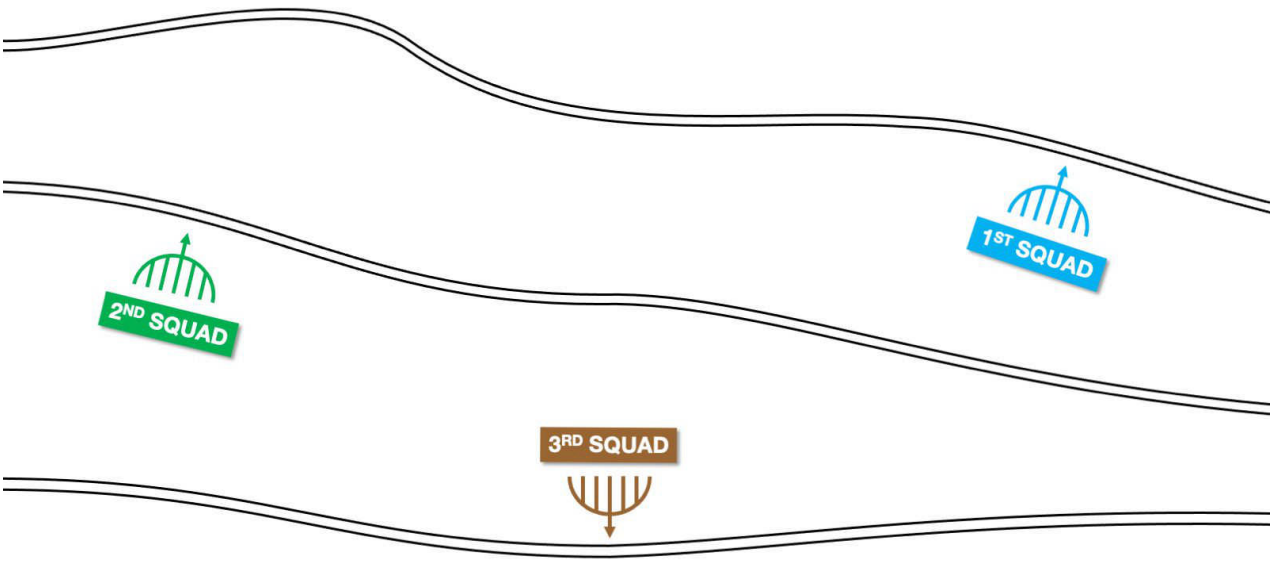
In many cases, it will be difficult or impossible to strike multiple elements of an enemy column simultaneously using deliberate ambushes. Even if the enemy adheres to rigid doctrinal formations and you have accurate intelligence and early warning, the variables and uncertainties of warfare will likely cause the enemy not to be perfectly aligned with your area ambush positions. Therefore, there are techniques you can employ to make it easier to strike multiple elements or echelons of a single march column simultaneously. In the example below, 2nd Squad (marked in green) sets up a deliberate ambush to strike the second element in the enemy formation. 1st squad (blue) is positioned to rapidly initiate a hasty ambush on the trail element after 2nd squad initiates. Finally, third squad is set up in a far ambush covering a long stretch of road with enfilade fire to engage the advance guard of the enemy formation. This is just one example of how you can set up different types of ambushes in a flexible manner to simultaneously (or nearly simultaneously) engage multiple elements of a single enemy column.



AREA AMBUSH: MULTIPLE AVENUES OF APPROACH

Covering Multiple Roads Through a Sector

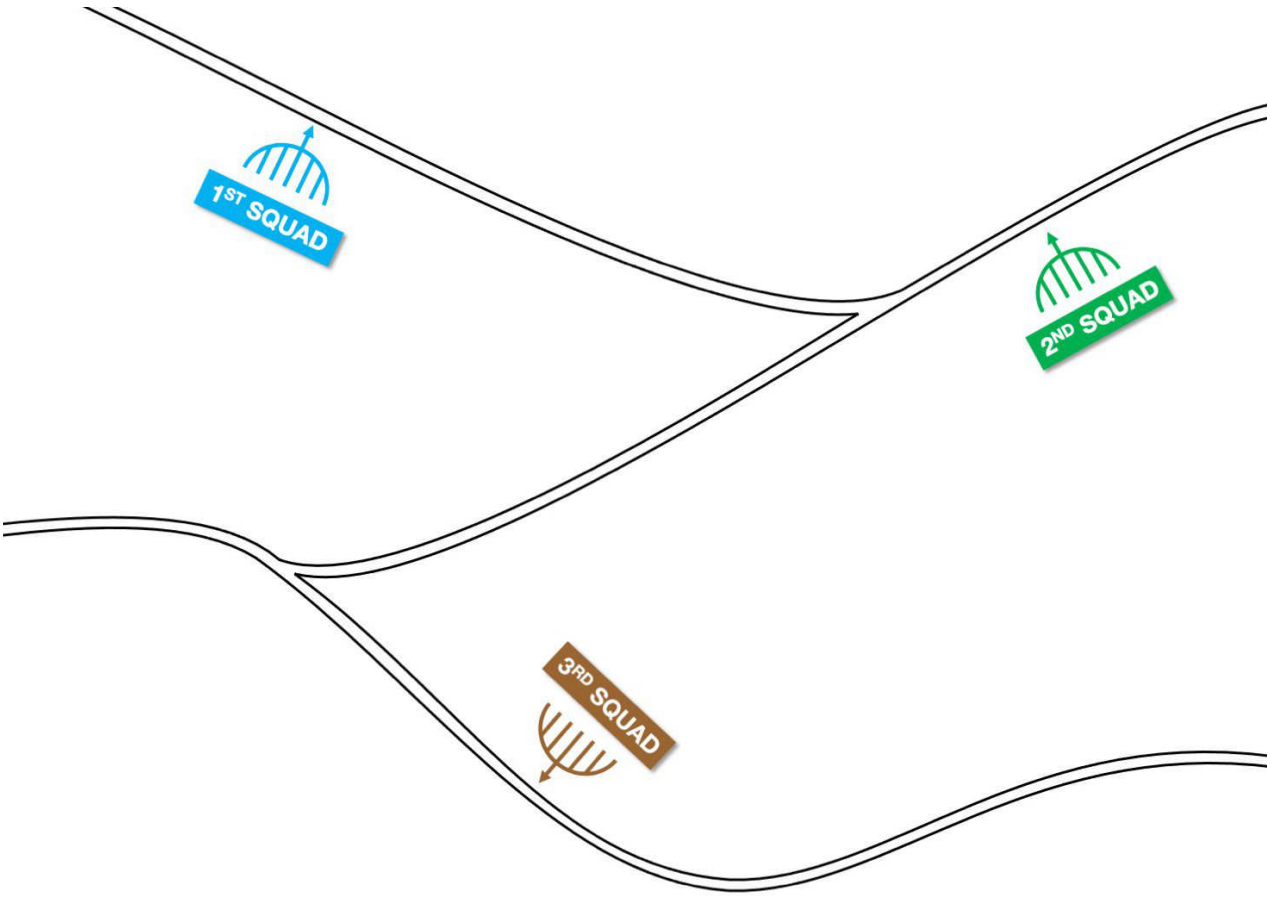
The previous examples of area ambushes focused on ambushing multiple elements or echelons of a single enemy march column. Another way to use the area ambush technique is to cover multiple roads in your platoon or company sector to disrupt or interdict enemy movement within a given sector. In the example below, there are three separate roads passing through your sector and the enemy could advance along any one of them. Your ambushes are positioned to hit the enemy no matter which road(s) he chooses to take. Your ambushes may not engage the enemy simultaneously and some ambushes might not engage the enemy at all if the enemy chooses not to use a certain road. As with other area ambushes, you can employ various ambush types and formations based on the situation and terrain. It is also important to position all ambushes to face in safe directions so there is minimal risk of friendly fire. If one ambush engages the enemy, it can be useful to plan alternate ambush sites and/or fallback positions to allow friendly forces to remain mobile and avoid an enemy response. When making these plans it is important to once again remain aware of surface danger zones to avoid accidental friendly fire incidents. Note that the example below is not to scale and is intended only to demonstrate concepts.



AREA AMBUSH: ROAD NETWORK

Covering Multiple Routes Through Road Networks

In some cases, there might be a complex network of roads in your sector. The more complex the road network, the more difficult it will be to cover all potential enemy routes. The enemy will likely be planning his movement to avoid your ambush efforts. So, f you do not position your forces intelligently, it is possible that the enemy will pass through unscathed. Remember that the enemy does not need to take the more direct or logical route and can make many unexpected turns to avoid your ambush elements. While the example below is intended only for demonstration purposes, it shows a potential ambush configuration that makes it impossible for the enemy to pass through the sector without encountering at least one ambush. Note that placing ambushes at intersections can increase the likelihood of making contact with the enemy but the enemy might also expect ambushes at intersections and might be more on their guard. It is up to you to use any combination of formations and techniques to cause as many problems as you can for enemy formations moving through your sector.



COMBAT APPLICATIONS
Ambush Battlecraft

Readers who are familiar with other infantry tactics books from Special Tactics will already be familiar with the term "battlecraft." We have chosen to adopt this term because there is no other existing term that accurately describes what we define as battlecraft. Battlecraft is the subset of tactics that deals specifically with fighting the enemy. We chose the term battlecraft because the term "craft" suggests a deeper, more complex understanding or artform beyond a rigid drill or process. Battle drills, an understanding of them and how to apply them forms one component of battlecraft. Immediate action response training, fire and maneuver, tactical use of terrain and close combat tactics also are component parts of the larger discipline of battlecraft.

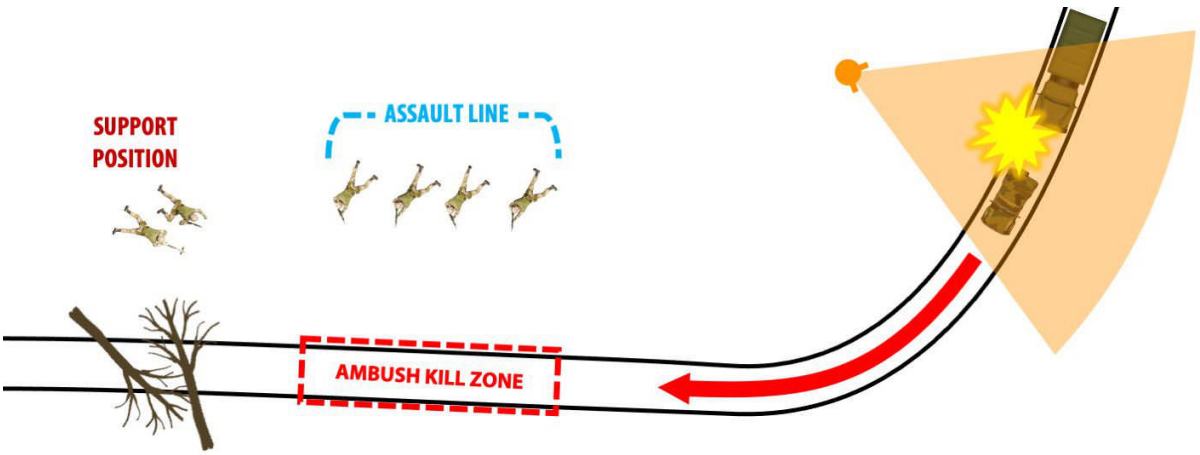
Building off this definition, ambush battlecraft goes beyond specific steps, procedures, formations, and techniques for setting up and employing an ambush. Ambush battlecraft discusses how to put all of these components together to defeat a living, thinking enemy. There are of course a nearly unlimited number of ways that combat leaders could creatively combine the various concepts and techniques explained so far in this book. The following section does not aim to cover every possibility but rather provide some useful or common examples to encourage creative thought. Studying the following battlecraft examples will reinforce your existing tactical skills and potentially expose you to some new ideas or concepts that are unfamiliar which you can then add to your tactical kit bag.

Some of the following scenarios and techniques are included in our other infantry tactics publications and some are unique to this book. Each one relates to the bigger picture of ambush tactics in different ways and can be adjusted or modified to fit a wide variety of situations. The following scenarios are not rigid prescriptions that you must follow to the letter, but rather examples of concepts and principles that you can employ creatively in different combinations to win on the battlefield.

USING MINES TO FORCE AN ENEMY REACTION

STEP 1: Set up the Ambush and Detonate the Mine

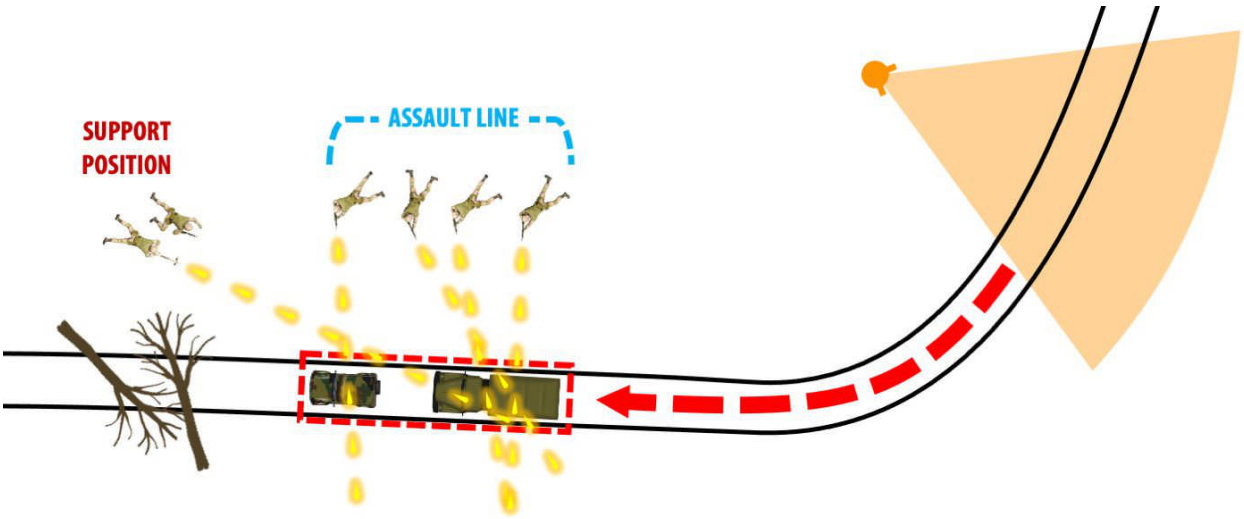
One technique for employing mines, explosives or other traps is to use them to force a hasty or panicked enemy reaction that makes him more vulnerable to a follow-on ambush or attack. For example, consider that you want to set up an ambush at a certain location but the terrain makes it unlikely that you will be able to keep your ambush force hidden from an alert enemy. What if there was a way to ensure that the enemy was less alert or careful when entering your ambush kill zone? If you know that the enemy's standard operating procedure (SOP) is to rapidly drive through an ambush site when struck with a mine or explosive device, you might set up an ambush in the configuration below. When you detonate the Claymore or explosive device, the enemy will accelerate according to their SOP. The enemy drivers will need to focus on the road to not lose control of their vehicles coming around the turn.



USING MINES TO FORCE AN ENEMY REACTION

STEP 2: Block the Enemy and Initiate the Ambush

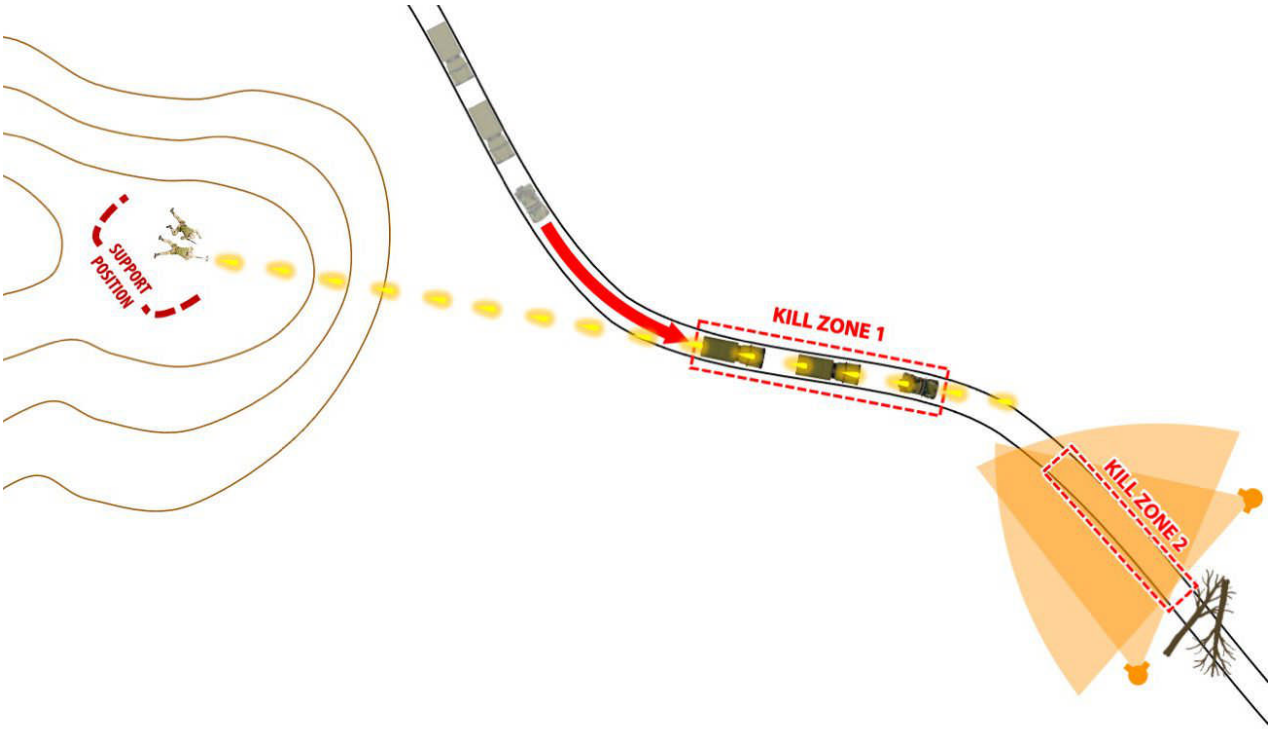
By the time the enemy convoy makes the turn it will be in your kill zone. At this point it is most likely too late for the enemy avoid the ambush or respond effectively. You might make the ambush even more effective by surprising the enemy with an obstacle after he makes the turn. If positioned properly, the enemy will not be able to see the obstacle before making the turn. Therefore, when you initiate the Claymore, the enemy will speed up, come around the turn and then need to slam on the brakes when he sees the obstacle. If set up properly, this will force the enemy to slow down or stop directly in your kill zone and make it difficult or impossible for him to drive through to safety.



USING MINES AS PART OF A TRAP

STEP 1: Set Up the Mines and Initiate the Ambush

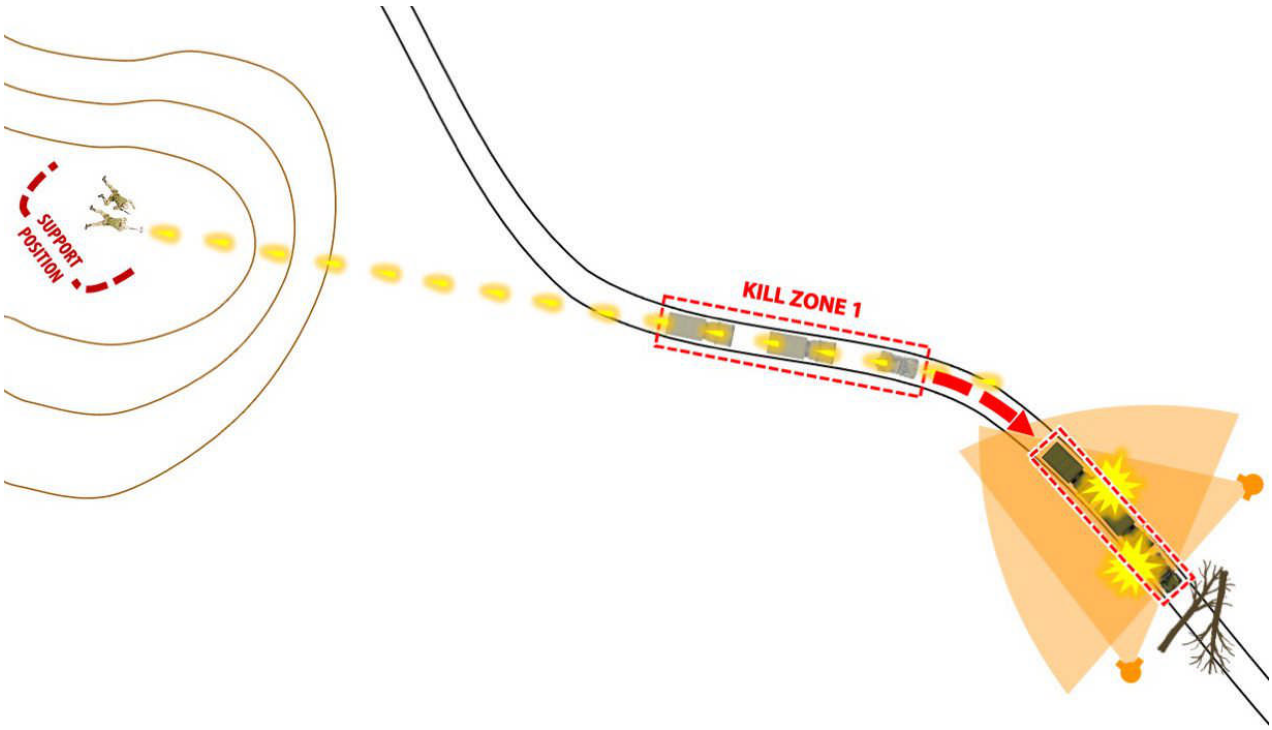
While in the previous example you used mines or explosives to drive the enemy force into your direct fire kill zone, in this example you use direct fire to drive the enemy into emplaced mines or a trap. This example uses a far ambush technique but you can employ this same concept using any combination of ambush types or formations. The machine gun on the high ground opens fire when the enemy convoy is passing through the kill zone along the road. The enemy speeds up to get out of the line of fire.



USING MINES AS PART OF A TRAP

STEP 2: Drive the Enemy Into the Trap

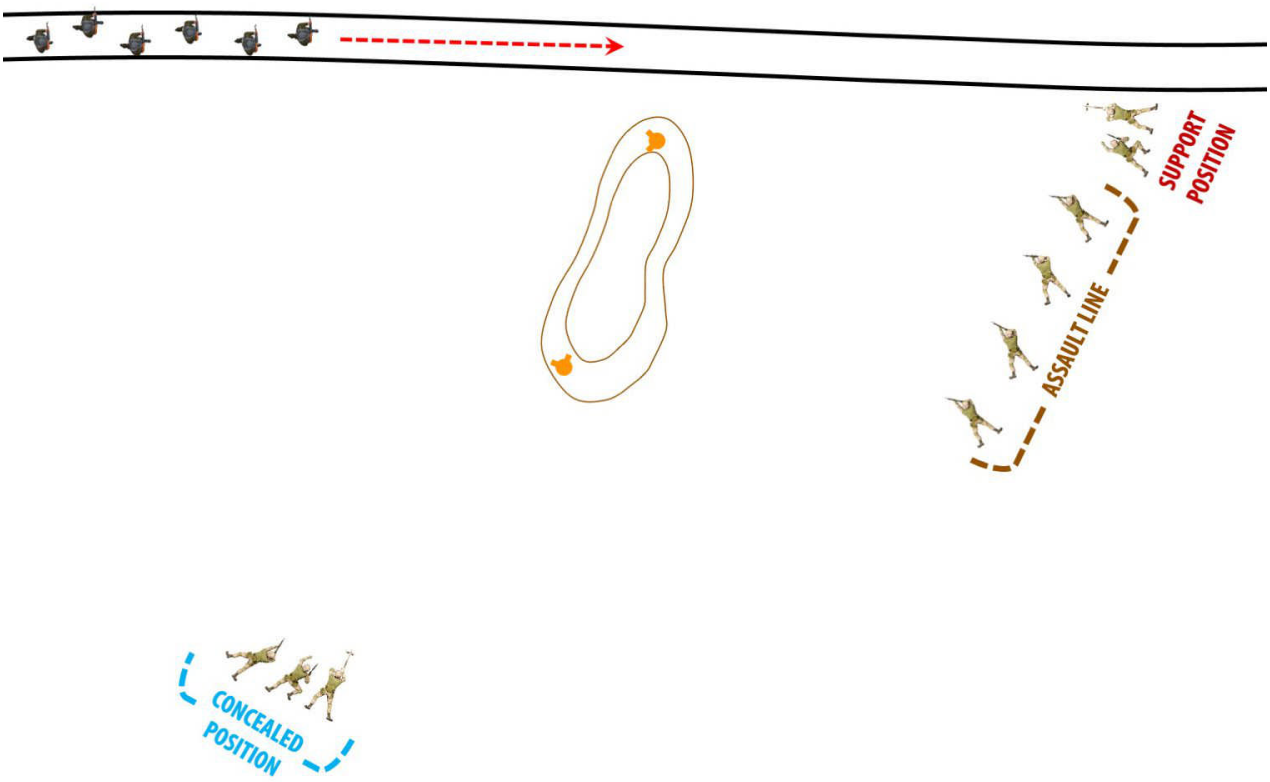
As the enemy speeds up to avoid the machine gun fire, he drives into a second kill zone covered by Claymores or other mines/explosives. As with any ambush, it is important to study the enemy's tactics and counter-ambush responses to best predict how the enemy will behave in a given scenario. Depending on the situation, you may or may not want to employ other obstacles (like the fallen trees in the example) to restrict the enemy's movement in certain ways. Using this sort of technique can be useful in a situation where you are worried about the enemy spotting or detecting your mines. By forcing the enemy to speed up or panic with your far ambush, you make it more likely that he will stumble into your mines or trap.



DRAWING THE ENEMY INTO A MINE/FIRE TRAP

STEP 1: Set Up the Trap and Wait for the Enemy

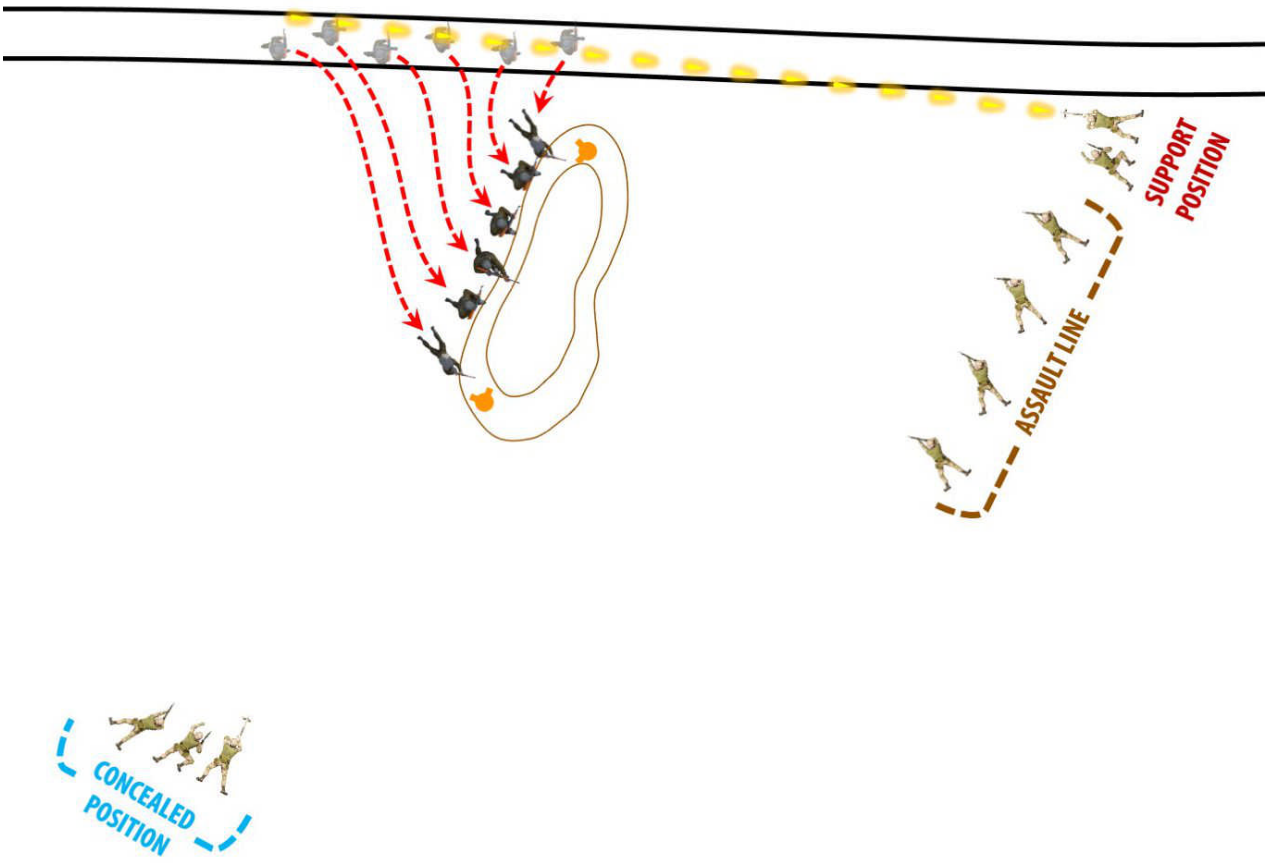
Similar to the earlier discussion of how to use mines to cover dead space in the kill zone, you can deliberately set up your kill zone to draw the enemy into a trap combining mines, direct fire or both. In the example below, you engage an enemy moving along a road with your machine gun just when the enemy is passing a position offering obvious cover from your fire. You have set up claymores and another machine gun to cover the position where the enemy will likely take cover.



DRAWING THE ENEMY INTO A MINE/FIRE TRAP

STEP 2: Open Fire to Lure the Enemy Behind Cover

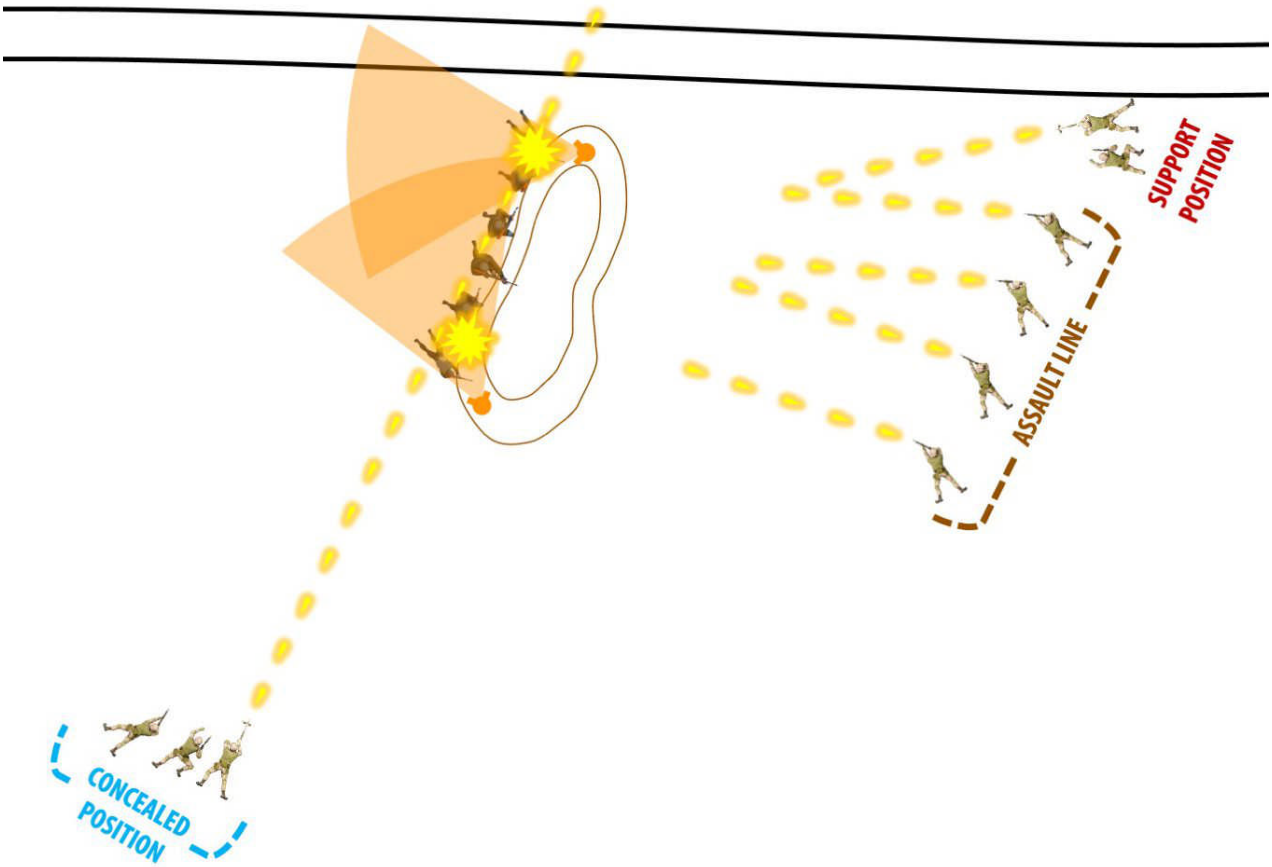
Open fire with the machine gun positioned along the road first and wait before opening fire with the second machine gun. This will give the enemy time to take cover behind the small hill where you plan to engage him. In the example below, the troops in the assault line can also engage but their fire is not shown in order to increase the clarity of the diagram.



DRAWING THE ENEMY INTO A MINE/FIRE TRAP

STEP 3: Engage with Claymores and Machine Gun Fire

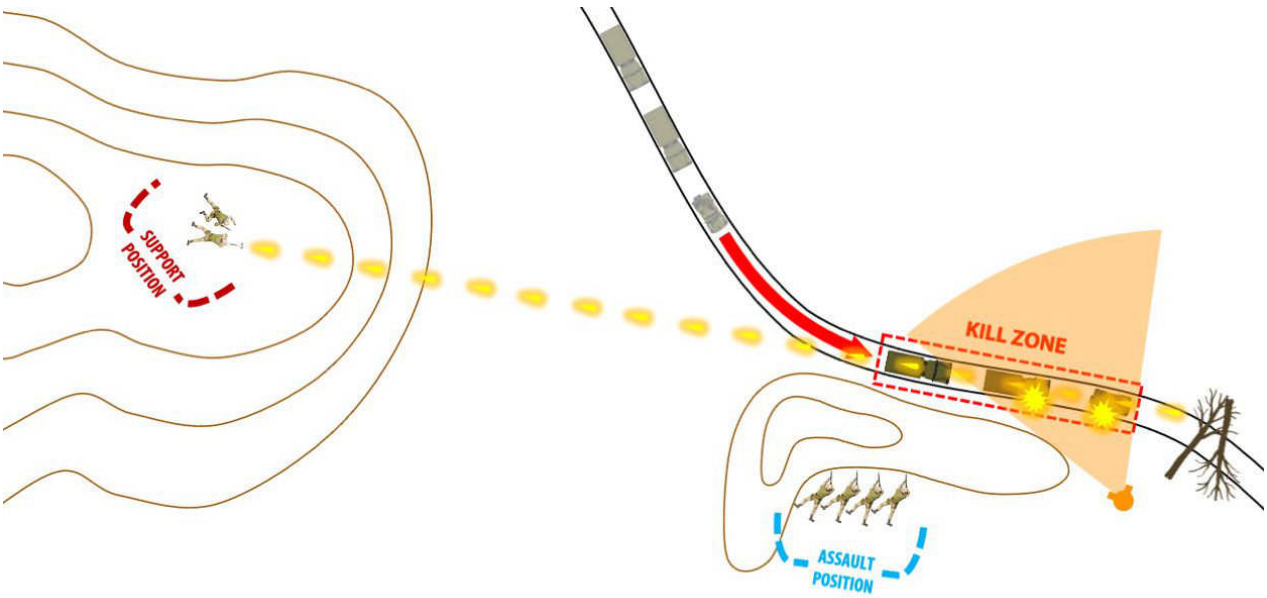
Once the enemy is bunched up behind the covered position, he is extremely vulnerable to your claymores and enfilade fire from your second machine gun. Engaging with both simultaneously offers the chance to completely destroy or neutralize the enemy force. You can also continue to engage with your support position and assault line to prevent the enemy from trying to escape or assault forward.



FAR AMBUSH WITH HIDDEN CLOSE ASSAULT

STEP 1: Far Ambush Element Engages the Enemy

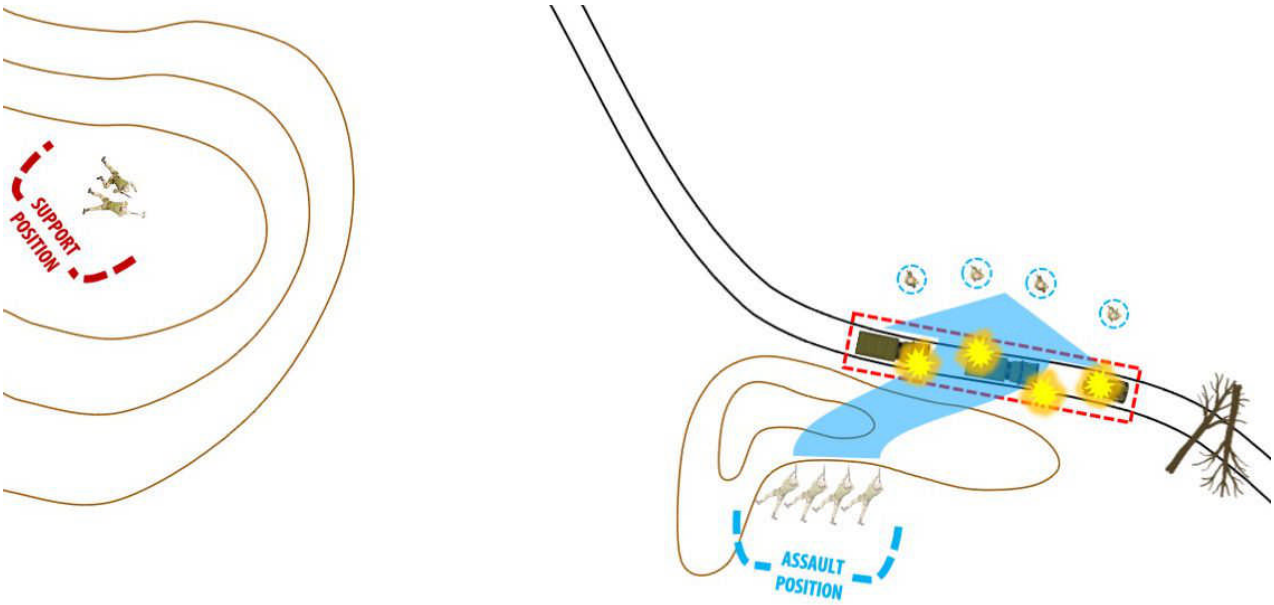
As already discussed, employing an assault element as part of an ambush can be dangerous, increase the chance that your force will be compromised and make the tactical situation more complex in general. One of the reasons for this is that in traditional linear ambush formations it is difficult for the assault line to be close enough to see and engage the enemy without being visible themselves. One solution to this problem is to engage the enemy in the kill zone from a concealed position at a safe distance and then assault the enemy formation with a force that is much better concealed. By deciding that the assault element does not need to see the enemy coming or engage the enemy in the kill zone, the assault element can remain well hidden and protected up to the last moment before the assault. The assault element can also use the terrain or even dig in to allow them to position much closer to the enemy, reducing the distance they have to assault across and increasing the element of surprise. In the example below, terrain masks the assault element from both friendly and enemy fire, allowing the support position to safely fire at an angle closer to the assault position than would normally be possible. In the example below, the initial ambush is augmented with a Claymore and an obstacle blocking the enemy convoy's forward movement.



FAR AMBUSH WITH HIDDEN CLOSE ASSAULT

STEP 2: Support Position Ceases Fire for Assault

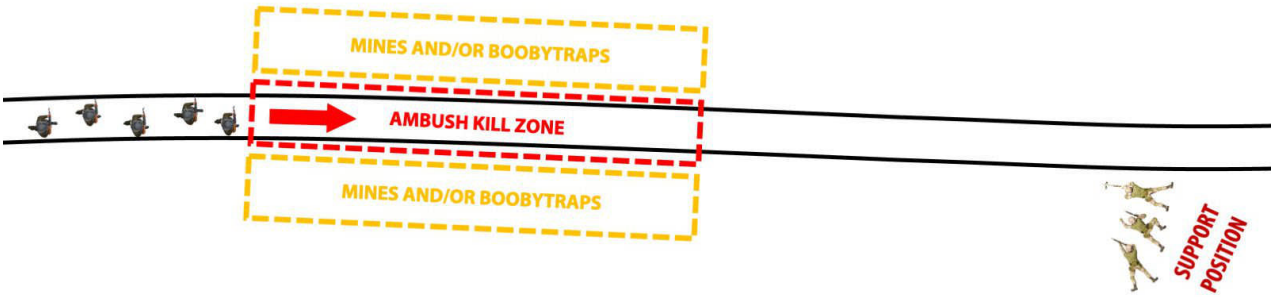
When conducting this type of ambush, clear signals and fire control are very important. It is critical that the support position cease or shift fire before the assault element emerges from their hiding spot. Once the assault element emerges it will be very close to the enemy and will likely achieve surprise. The assault element can employ fragmentation grenades or stun grenades to increase the element of surprise if needed. The assault element can quickly accomplish its actions on the objective and then withdraw covered by the support position, which can remain in place for longer given that it is farther away and better concealed.



MINES AND PREDICTABLE ENEMY RESPONSE

STEP 1: Emplace Mines Around the Kill Zone

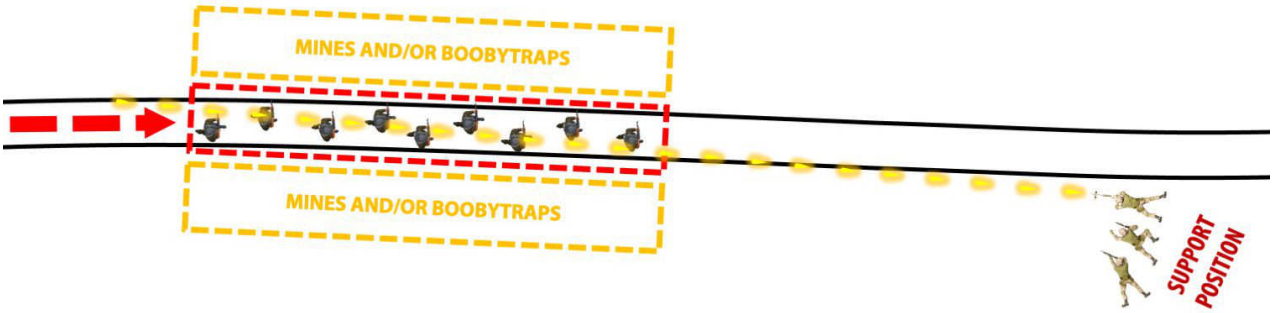
Depending on the enemy's counter-ambush tactics and SOPs, it is possible to emplace mines in a way that capitalizes on predictable enemy response patterns. The example below is a common tactic employed against either dismounted or mounted forces whose SOP is to move off of a road to either side when ambushed from the front or rear with direct fire. To set up this ambush, identify the kill zone and emplace mines, traps, or trip wires in likely spots where enemy troops might take cover.



MINES AND PREDICTABLE ENEMY RESPONSE

STEP 2: Engage the Enemy with Direct Fire

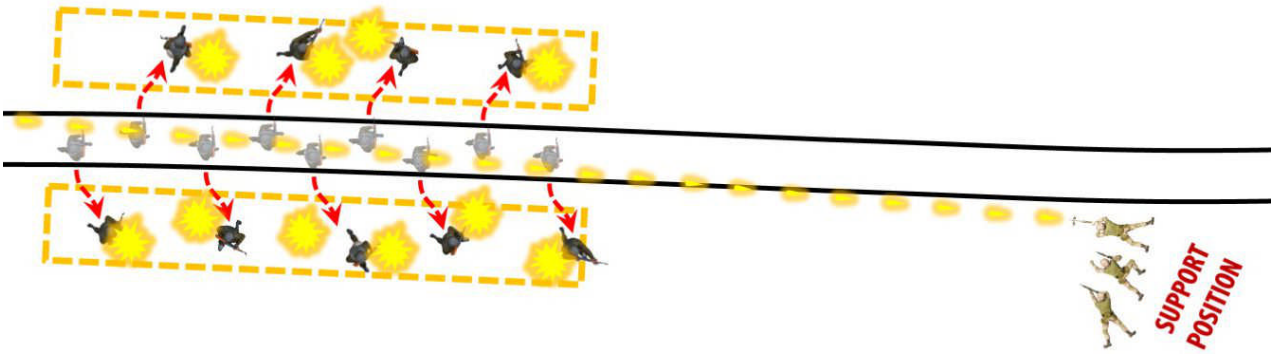
Engage the enemy with your direct fire ambush. While part of your objective is to drive the enemy into the traps on either side of the road, you should still try to destroy as much of the enemy force as possible with your fire. The enemy will be faced with a more difficult dilemma if he faces equal danger remaining in the road or getting off the road.



MINES AND PREDICTABLE ENEMY RESPONSE

STEP 3: Force the Enemy Into the Trap

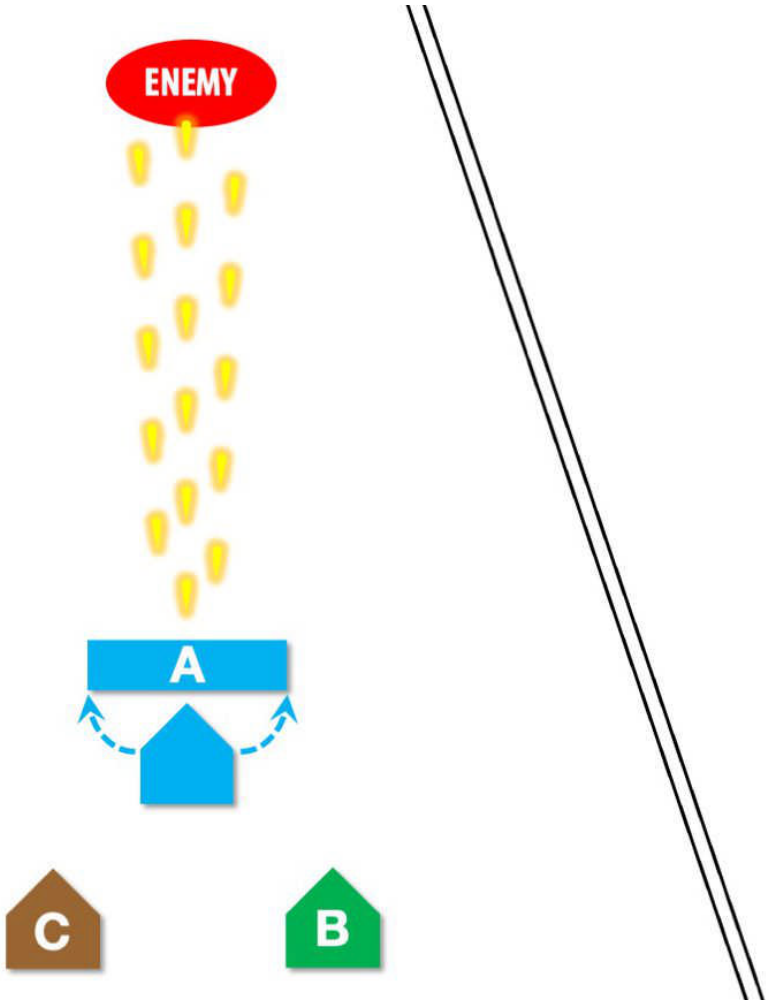
As the enemy moves off the road to take cover, he will be detonating the mines and boobytraps you positioned to trap him. Incorporating these sorts of traps into a far ambush can also help buy time for your ambush force to escape while the enemy is busy dealing with the mines and traps. As already mentioned, this same type of ambush can be effective against vehicles if the enemy SOP is to pull vehicles off the road when attacked from the front or rear.



HAMMER AND ANVIL AMBUSH

STEP 1: Lead Team Makes Contact and Returns Fire

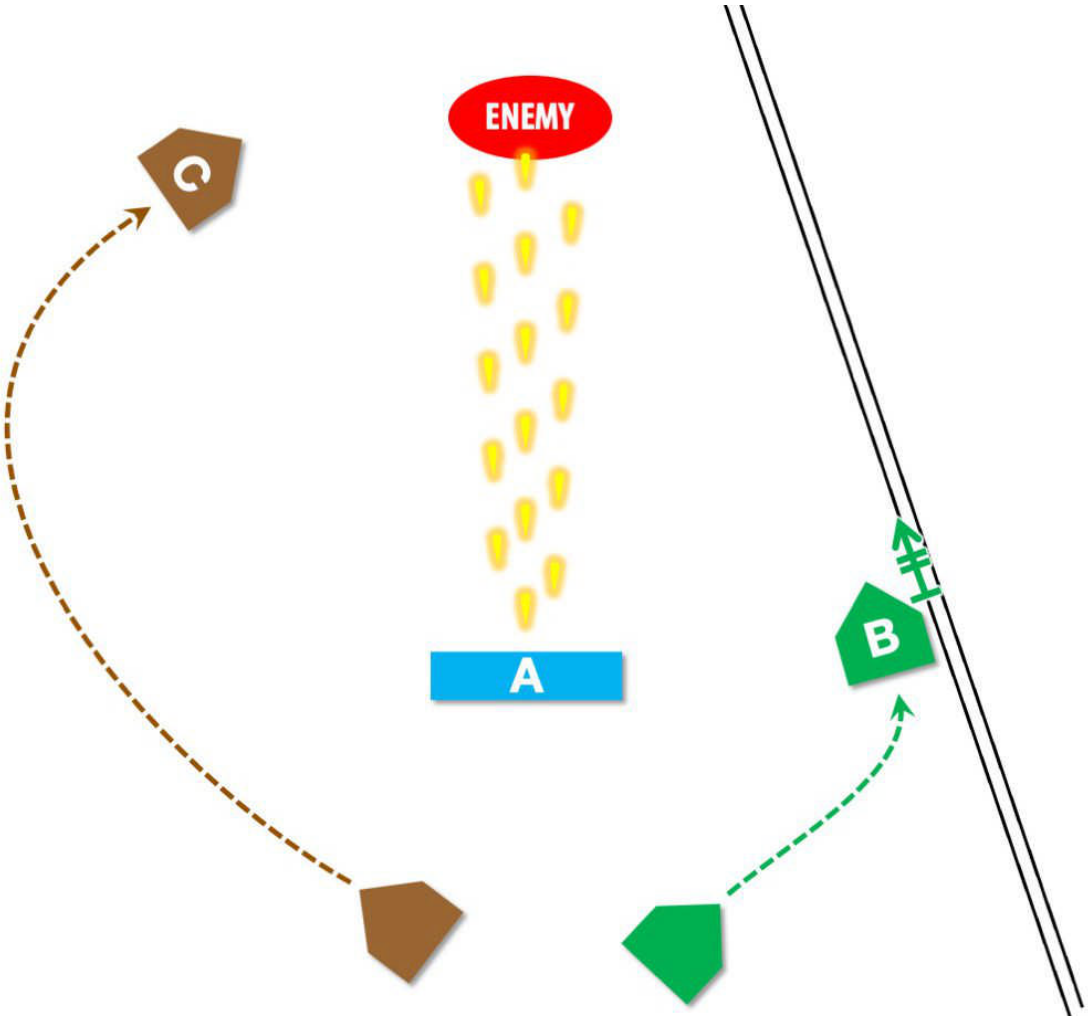
One problem with the traditional suppress and flank battle drill is that it is possible for the enemy to escape or break contact if the volume of fire laid down by the support element is not overwhelming. If your goal is to destroy the enemy force and you have three elements, you can use the third element to set up an ambush along the enemy's line of retreat. There are many ways to do this but one of the simpler ways is to emplace a far ambush aligned down a road or linear danger area. In the example below, the maneuver begins with the lead element making contact, coming on-line, and laying down suppressing fire.



HAMMER AND ANVIL AMBUSH

STEP 2: B Team Sets Up MG on the Road as C Team Flanks

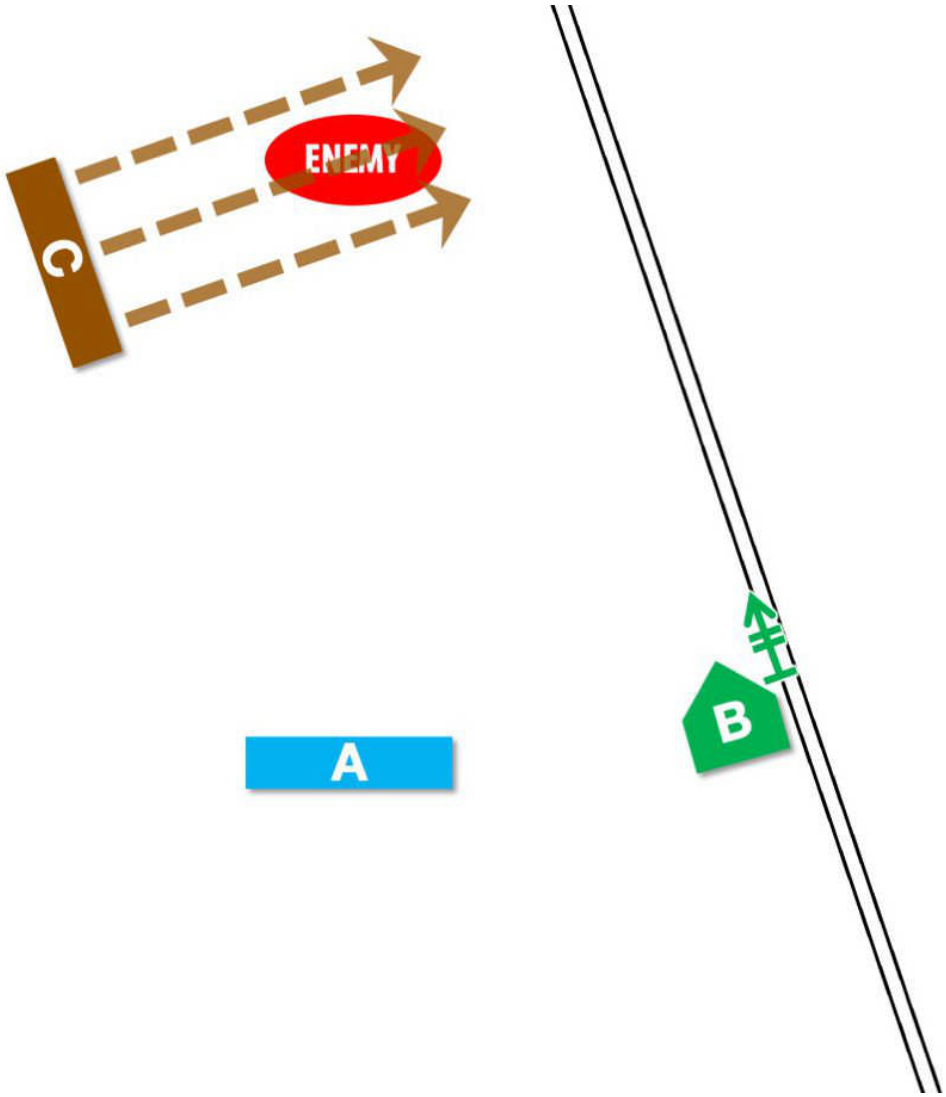
Once the lead time makes contact and begins suppressing the enemy, the squad leader decides to use the road to the right as an "anvil" against which to drive the enemy force. The squad leader sends B Team and at least one medium machine gun to establish a far ambush along the road. At the same time, C Team will flank around to the right in a standard flanking maneuver against the enemy position.



HAMMER AND ANVIL AMBUSH

STEP 3: C Team Assaults Through the Objective

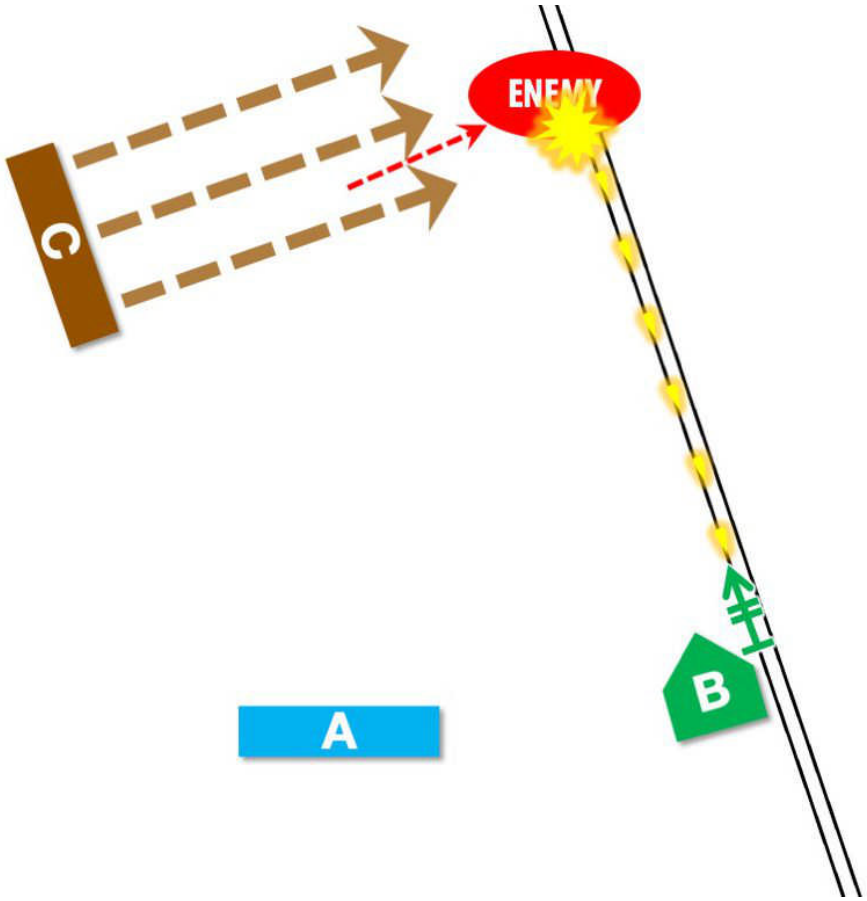
Once in the assault position, C Team will assault through the objective just as in a standard flanking battle drill. A Team will cease fire, shift fire or lift fire to ensure they do not shoot members of the assault team. B Team and the machine gun will maintain coverage of the road and remain concealed as much as possible.



HAMMER AND ANVIL AMBUSH

STEP 4: C Team and MG Engage Retreating Enemies

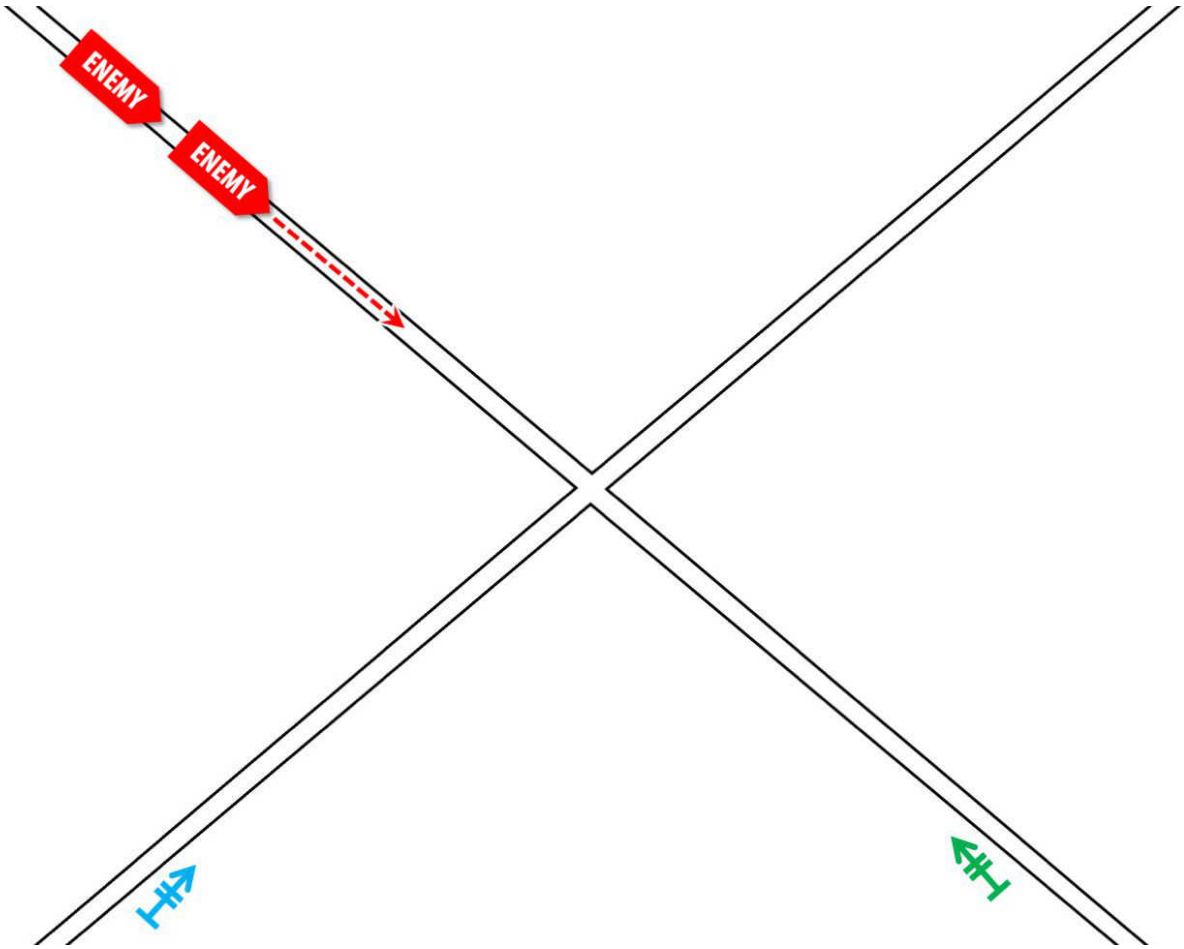
As C Team assaults through, in order to fall back the enemy needs to cross a road. That road is covered by B Team and a medium machine gun. So, when the enemy falls back and exposes himself crossing the road, he will be hit by your machine gun bullets. The enemy will be especially vulnerable when crossing the road. If enemy troops are wounded and fall in the road it will create additional stress for the rest of the element since they will have to expose themselves to evacuate the casualties. If the enemy decides not to cross the road because of the machine gun, they will be fixed in place and vulnerable to C Team's assault.



INTERSECTION TRAP AMBUSH

STEP 1: Set Up a Machine Gun on Each Road

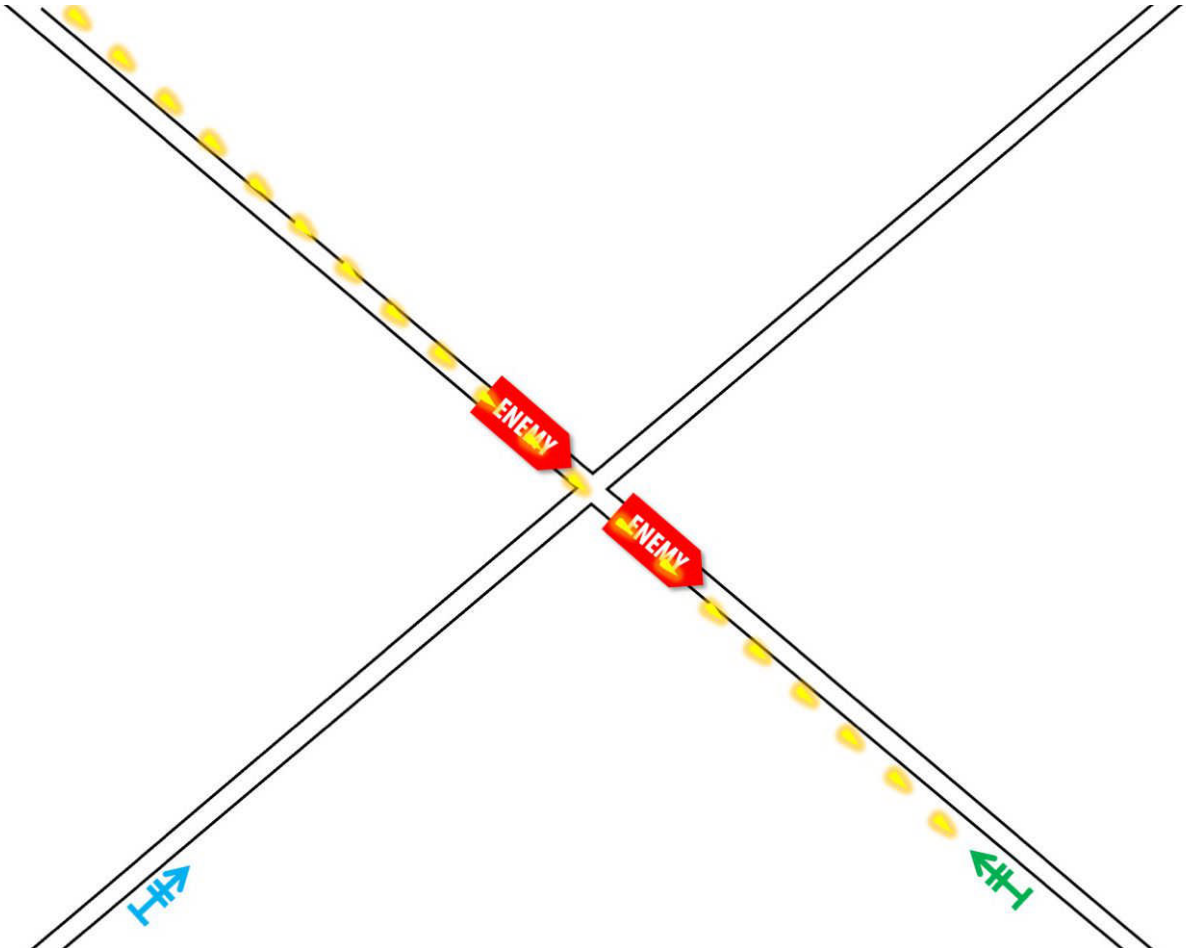
This technique can be particularly effective against enemy forces moving in a column with multiple elements for added security. Begin by setting up two far ambush positions or machine guns facing the intersection on separate roads. Ideally, the two guns should not be separated by a road. This will allow them to break contact or be mutually supporting without having to cross a road. The enemy will approach down one of the two roads towards the intersection. Wait to open fire until the enemy reaches or has begun to cross the intersection.



INTERSECTION TRAP AMBUSH

STEP 2: Achieve Enfilade Fire on the Enemy Column

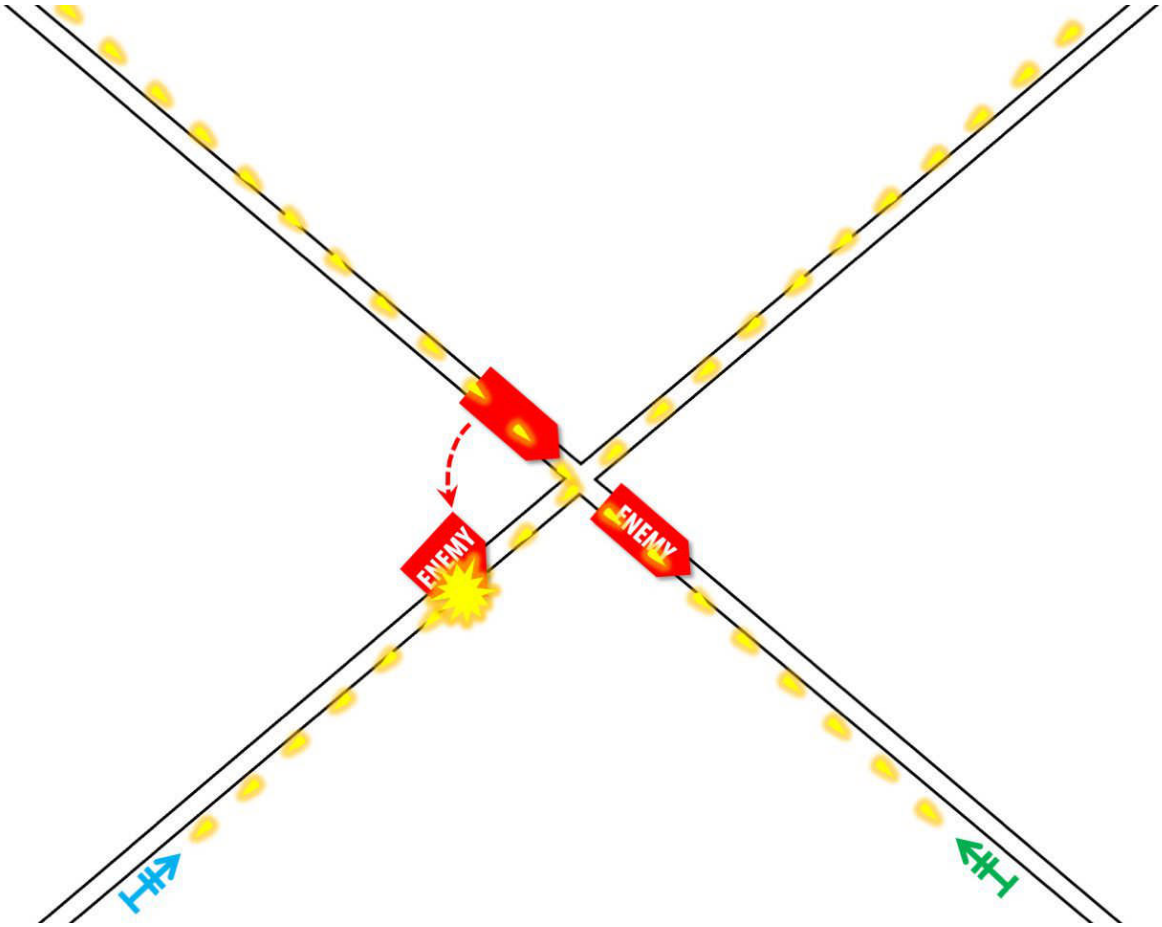
When the enemy reaches the intersection, open fire with the gun that can achieve enfilade fire on the advancing enemy column. There are different advantages to opening fire at different points as the enemy is crossing the intersection. If the enemy is moving in multiple columns, it can be effective to open fire when only the first column has crossed the intersection. As with employing enfilade fire down a single road, try to cause as much damage as possible to the enemy force early in the engagement while he is most exposed on the road.



INTERSECTION TRAP AMBUSH

STEP 3: Open Fire with the Second Machine Gun

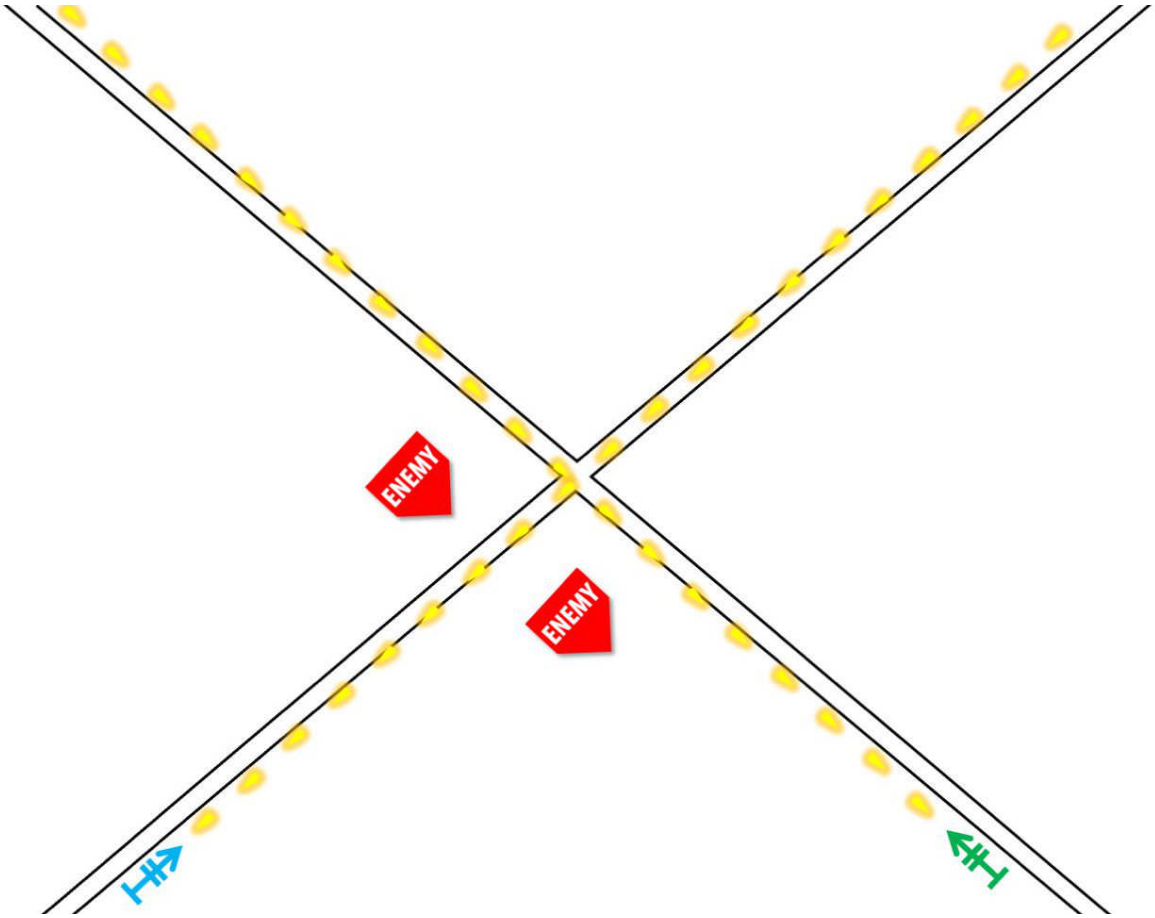
When the enemy column comes under fire, the lead element will likely absorb most of the damage and will probably attempt to get off the road, come on-line and return fire. The rear element may try to flank or at least move forward to provide help. However, in order to do this the second element will have to cross the road covered by the second gun (marked in blue). Once again, there are different advantages to opening fire at different times. One technique is to wait until trail elements attempt to cross the road covered by the blue gun and then open fire to surprise the enemy as he is crossing.



INTERSECTION TRAP AMBUSH

STEP 4: Trap the Enemy Elements on Opposite Sides

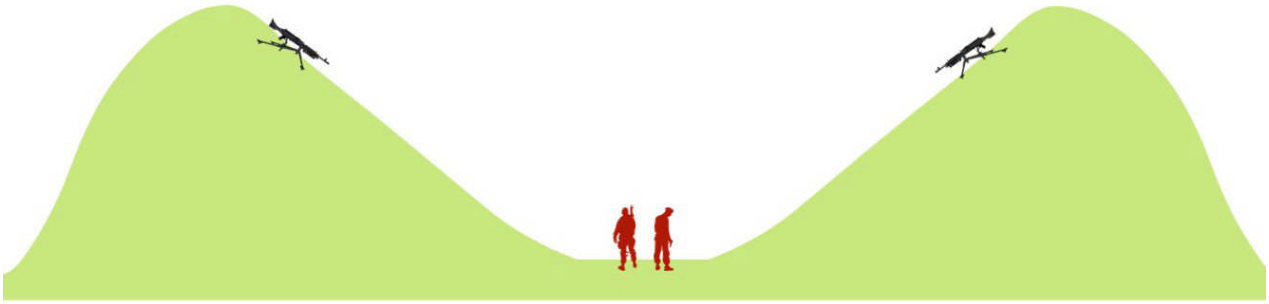
In some situations, it might be possible to trap enemy elements on opposite sides of the road by laying down heavy fire with the gun marked in blue. The lead element will not be able to pull back without crossing a road covered by machine gun fire and the rear element will not be able to advance past the road to help the lead element. This can be very disruptive and demoralizing for the enemy force and could make it easier for you to win the engagement and destroy the enemy. If the enemy does decide to cross the road under fire, he will likely suffer more casualties. In the image below, both guns are firing directly down the roads to illustrate the concept we are discussing but in reality, they would be firing on the enemy force. The illustration is only meant to show how the guns can cover the roads in a way to trap enemy forces on either side.

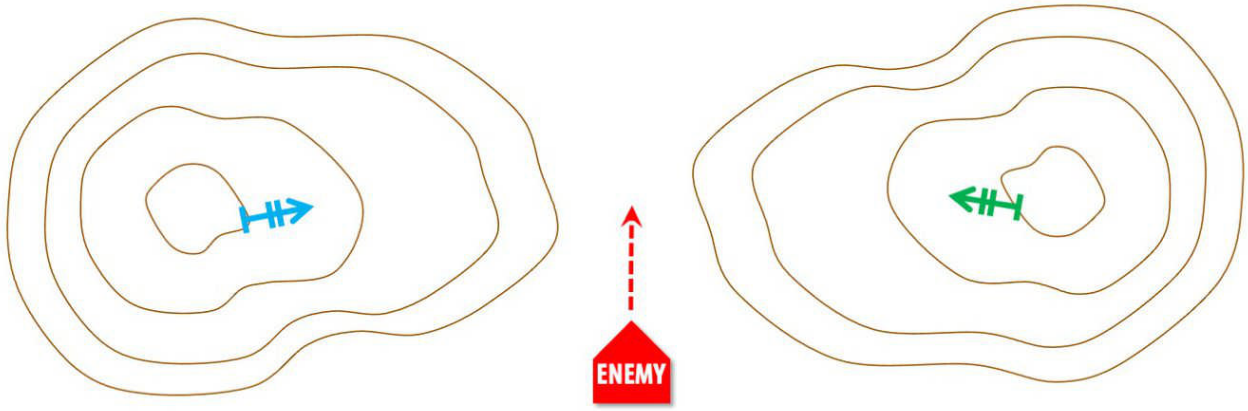


FAR AMBUSH FROM HIGH GROUND

STEP 1: Set Up Ambush Positions Safely on High Ground

Positioning ambush positions or machine guns on high ground offers a number of advantages. First, it allows you to achieve plunging fire more easily and it can also increase the effective range of your fire. Second, it gives you more flexibility when it comes to danger zones and gun positioning. Ordinarily, you cannot have two guns firing on either side of the enemy the two guns might accidentally shoot each other. When firing from high ground, this rule can change.

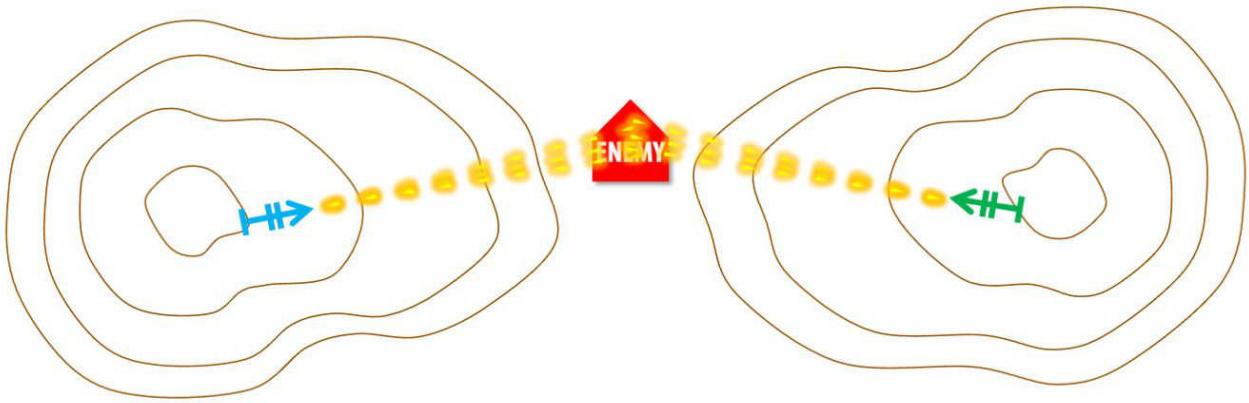




FAR AMBUSH FROM HIGH GROUND

STEP 2: Open Fire From Multiple Angles

In the example below, the two machine guns can safely open fire on the enemy even though they are facing each other because they are also both shooting down. This puts the enemy in a very difficult position, taking fire from each side. Depending on the terrain, it is also possible to put more ambush positions or guns into the fight from different angles. If a ridge wraps around the enemy in a U-shape, you might fire from each side and place an additional gun firing from the front. However, whenever firing from high ground it is important to factor in safety considerations. Depending on the range and angle of fire it is still possible for bullets to ricochet and hit friendly forces. Second, if the enemy decides to assault uphill towards one of the gun positions and the other guns continue to fire on the enemy, the fire might walk up the hill to a point where it is in danger of hitting friendly forces. Therefore, while firing from high ground can change the rules when it comes to danger zones, you still must be careful and establish additional control measures to ensure safety.



FURTHER TRAINING
Courses and Resources

This book provides an overview of small unit infantry ambush tactics. However, the book leaves many areas unexplored especially when it comes to other elements of infantry combat including mission planning, small unit patrolling, recon, machine gun employment and deliberate defensive operations. There are a variety of other Special Tactics publications, both current and in production, that are designed to complement this book. The *Squad-Level Infantry Rural Combat* book and the *Small Unit Machine Gun Employment* book are particularly useful companions for this book and offer a great deal of knowledge that is relevant to ambush operations. For more information on these publications, please visit **www.specialtactics.me.**

Every Special Tactics book has a companion online course. If you cannot find the online course associated with your book that means it is still in production and has not yet been released. Visit our website to explore our growing selection of online courses. Online courses compliment the material covered in the books and present knowledge and information in a variety of multimedia formats including interactive presentations, animations, videos, and podcasts. All online courses also include interactive quizzes, tests, and a serial-numbered completion certificate.

Finally, Special Tactics also offers in-person training. For information about upcoming courses or to request a custom course at your location please contact us on our website. If you have any other questions, comments or suggestions regarding this book, the Special Tactics staff welcomes you to contact us on our website at **www.specialtactics.me**. We look forward to hearing from you and hope you found this book worthwhile. Thank you for keeping our country and communities safe.